THIS BOOK IS NOT
TO BE PHOTOCOPIED

University of London

ACCOUNTS AND PAPERS:

TWENTY-SIX VOLUMES.

—(15.)—

WOODS, FORESTS, &c.;
GENERAL BOARD OF HEALTH;
MEDICAL; LUNACY.

Session
31 *January* —— 29 *July* 1856.

VOL. LII.

1856.

ACCOUNTS AND PAPERS:

1856.

TWENTY-SIX VOLUMES:—CONTENTS OF THE

FIFTEENTH VOLUME.

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WOODS, FORESTS, AND LAND REVENUES.

1854-5.

ABSTRACT ACCOUNTS of the COMMISSIONERS of HER MAJESTY'S WOODS, FORESTS and LAND REVENUES, for the Year ended 31st March 1855; with REPORT from the COMMISSIONERS of AUDIT, dated the 31st January 1856; TREASURY MINUTE, dated 5th February; REPORT from the COMMISSIONERS of WOODS, &c., dated 15th February; TREASURY MINUTE, dated 19th February; FURTHER REPORT from the COMMISSIONERS of AUDIT, dated 28th February; FURTHER TREASURY MINUTE, dated 29th February; and FURTHER REPORT from the COMMISSIONERS of WOODS, &c., dated 3d March, in regard thereto.

(*Presented in pursuance of the 37th Section of the Act* 14 *&* 15 *Vict. c.* 42.)

Ordered, by The House of Commons, *to be Printed,*
4 *March* 1856.

I.—ABSTRACT ACCOUNT, showing the RECEIPT and EXPENDITURE of the Commissioners 31st of March 1855

Dr. "THE CAPITAL OF THE LAND

RECEIPT.				CASH, &c.			Stock and other Securities.		
				£.	s.	d.	£.	s.	d.
To Balances on the 1st of April 1854				29,956	12	3	112,269	19	10
To RECEIPTS under the following Heads, viz.:									
	£.	s.	d.						
Sales of Estates, &c.	70,842	1	–						
Sales of Unimprovable Rents, &c.	18,667	14	7						
Sales of Encroachments in Wales, &c.	802	2	1						
Enfranchisements of Copyholds	3,919	3	2						
Sales of Land, Forestal Rights, &c., in the Royal Forests	364	1	9						
Dividends of Stock (Asgill House, Richmond)	13	10	3						
Miscellaneous Receipts	5	2	1						
				94,613	14	11			
To Cash Account, for Stock purchased				–	–	–	6,931	5	7
To Three per Cent. Consolidated Annuities, for Stock sold				73,380	–	–			
To 3¼ per Cent. Annuities, Bank of Ireland, for Stock sold				38,859	8	2			
			£.	236,809	15	4	119,201	5	5

of Her Majesty's Woods, Forests, and Land Revenues, for the Year ended on the
on Account of—

REVENUE," per Acts 10 Geo. 4, c. 50, and 14 & 15 Vict. c. 42. *Cr.*

EXPENDITURE.	£. s. d.	£. s. d.	CASH, &c. £. s. d.	Stock and other Securities. £. s. d.
By EXPENDITURE under the following Heads, viz.:				
Purchases of Estates, &c. - - - - - -	187,075 – –			
Purchase of Land adjoining Alice Holt Forest - -	62 – –			
Enfranchisement of Copyholds - - - - -	50 – –			
Miscellaneous Payments - - - - - -	3,522 17 4			
			190,709 17 4	
By Three per Cent. Consolidated Annuities, for Stock purchased - - -			6,000 – –	
By Three per Cent. Reduced Annuities, for Stock purchased - - -			13 10 3	
By Cash Account, for Stock sold - - - - - - - - -			- - -	118,176 – 10
By Balances on the 31st of March 1855 - - - - - - - -			40,086 7 9	1,025 4 7
		£.	236,809 15 4	119,201 5 5

II.—ABSTRACT ACCOUNT, showing the RECEIPT and EXPENDITURE of the Commissioners 31st of March 1855,

Dr. "THE INCOME OF THE LAND

RECEIPT.

I.—LAND REVENUE.

	£.	s.	d.	£.	s.	d.
To Balance on the 1st of April 1854 (Net available)				56,266	7	9
To Crown Rents, &c.	277,282	9	–			
„ Profits of Manors, &c.	4,275	5	7			
„ Profits of Mines, &c.	14,102	16	4			
„ Fines on the renewal of Crown Leases	200	–	–			
„ Fees on Acquittances of Rents in Ireland	1,084	10	5			
„ Fees for Leases, Conveyances, Assignments, &c.	2,133	17	3			
„ Sales of Produce of Crown Estates	17,282	18	10			
„ Interest of Money	3,400	3	9			
„ Haymarket, Regent's Park	248	11	2			
„ Rolls Estate	1,599	13	9			
„ King-Williamstown Estate, Ireland	1,381	9	7			
„ Interest of Purchase Moneys of Estates sold	430	15	5			
„ Superannuation Fund	475	1	10			
„ Miscellaneous Receipts	816	5	4			
RECEIPT from "LAND REVENUE"			£.	324,713	18	3

II.—WINDSOR FOREST AND PARKS.

To Windsor Forest and Parks, for Receipt				6,539	14	4
Carried forward			£.	387,520	–	4

of Her Majesty's Woods, Forests and Land Revenues, for the Year ended on the
on Account of—

REVENUE," per Acts 10 Geo. 4, c. 50, and 14 & 15 Vict. c. 42. *Cr.*

EXPENDITURE.

I.—LAND REVENUE.

	£.	s.	d.	£.	s.	d.
By Fees and Expenses paid to the Keeper of the Land Revenue Records -	866	9	–			
„ Salaries and Per-Centage of Receivers, &c. - - - - - -	7,214	5	6			
„ Salaries and Per-Centage of Stewards of Manors, &c. - - - -	327	12	6			
„ Incidental Expenses of Receivers, &c. - - - - - - - -	238	17	4			
„ Incidental Expenses of Stewards of Manors, &c. - - - - -	297	6	6			
„ Surveys, &c., of Crown Property - - - - - - - - -	3,969	8	8			
„ Expenses connected with the Mines in Dean Forest and Chopwell Woods	1,007	9	2			
„ Repairs and Improvement of Crown Estates - - - - - -	20,830	14	4			
„ Allowances to Crown Tenants - - - - - - - - -	92	3	8			
„ Rates and Taxes on Crown Property, including Property Tax allowed to Crown Tenants - - - - - - - - - - - -	12,032	11	7			
„ Queen's Road, Kensington - - - - - - - - - -	194	2	3			
„ Haymarket, Regent's Park - - - - - - - - - -	130	1	6			
„ Rolls Estate - - - - - - - - - - - - -	83	18	–			
„ King-Williamstown Estate, Ireland - - - - - - - -	1,069	17	2			
„ Fixed Charges, Pensions, Stipends and Allowances - - - -	7,572	16	8			
„ Donations to Churches, Schools, &c. - - - - - - - -	490	11	–			
„ Miscellaneous Payments - - - - - - - - - -	5,768	10	9			
EXPENDITURE for "LAND REVENUE" - - - £.				62,186	15	7

II.—WINDSOR FOREST AND PARKS.

By Windsor Forest and Parks (including the Royal Stand and Hound Kennel at Ascot), for Expenditure - - - - - - - - - - - - - - - - -				19,706	17	6
Carried forward - - - £.				81,893	13	1

Dr. ABSTRACT ACCOUNT of the "INCOME of the LAND REVENUE,"

	£. s. d.	£. s. d.
Brought forward - - -		387,520 - 4
III.—ROYAL FORESTS AND WOODLANDS.		
To New Forest - - - - - - - - - - - - - - - -	18,675 5 11	
„ Dean Forest - - - - - - - - - - - - - - - -	13,789 15 10	
„ Highmeadow Woods - - - - - - - - - - - - - -	2,505 5 -	
„ Alice Holt Forest - - - - - - - - - - - - - -	1,552 1 5	
„ Woolmer Forest - - - - - - - - - - - - - - -	826 11 5	
„ Bere Forest - - - - - - - - - - - - - - - -	2,245 5 2	
„ Parkhurst Forest - - - - - - - - - - - - - -	1,067 13 4	
„ Whittlewood Forest - - - - - - - - - - - - -	978 1 9	
„ Hazleborough Wood - - - - - - - - - - - - -	23 10 8	
„ Salcey Forest - - - - - - - - - - - - - - -	1,214 2 2	
„ Delamere Forest - - - - - - - - - - - - - -	3,310 14 7	
„ Wychwood Forest - - - - - - - - - - - - - -	2,126 3 2	
„ Chopwell Woods - - - - - - - - - - - - - - -	4,188 12 1	
RECEIPT from "ROYAL FORESTS and WOODLANDS" - - - £.		52,503 2 6
£.		440,023 2 10

III.—ABSTRACT ACCOUNT, showing the RECEIPT and EXPENDITURE of the Commissioners 31st of March 1855,

Dr. "DRAINING, or otherwise Improving the

RECEIPT.	Cash, &c.	Exchequer Bills.
	£. s. d.	£. s. d.
To Balances on the 1st of April 1854 - - - - - - - - - - - -	426 3 10	3,800 - -
To Receipt in 1854–5 - - - - - - - - - - - - - -	134 5 8	—
£.	560 14 6	3,800 - -

for the Year ended on the 31st of March 1855—*continued.* *Cr.*

	£. s. d.	£. s. d.
Brought forward - - -		81,893 13 1
III.—ROYAL FORESTS AND WOODLANDS.		
By New Forest - - - - - - - - - - - - - - - - - -	15,697 6 6	
„ Dean Forest - - - - - - - - - - - - - - - - - -	11,186 9 9	
„ Highmeadow Woods - - - - - - - - - - - - - - - -	2,266 3 7	
„ Alice Holt Forest - - - - - - - - - - - - - - - -	1,536 14 1	
„ Woolmer Forest - - - - - - - - - - - - - - - - -	722 17 5	
„ Bere Forest - - - - - - - - - - - - - - - - - -	1,268 16 5	
„ Parkhurst Forest - - - - - - - - - - - - - - - -	1,061 4 8	
„ Whittlewood Forest - - - - - - - - - - - - - - -	724 3 8	
„ Hazleborough Wood - - - - - - - - - - - - - - -	63 12 4	
„ Salcey Forest - - - - - - - - - - - - - - - - -	900 14 7	
„ Delamere Forest - - - - - - - - - - - - - - - -	1,917 2 8	
„ Wychwood Forest - - - - - - - - - - - - - - - -	486 11 10	
„ Waltham Forest - - - - - - - - - - - - - - - - -	152 - -	
„ Epping Forest - - - - - - - - - - - - - - - - -	213 - 4	
„ Chopwell Woods - - - - - - - - - - - - - - - - -	2,042 5 4	
EXPENDITURE for "ROYAL FORESTS and WOODLANDS" - - - £.		40,239 3 2
		122,132 16 3
By Consolidated Fund:		
For Amount paid over to the Exchequer in 1854-5, as Surplus Income - - - - - -		272,571 16 8
		394,704 12 11
By Balance on the 31st of March 1855 (Net available) - - - - - - - - - - - -		45,318 9 11
£.		440,023 2 10

of Her Majesty's Woods, Forests and Land Revenues, for the Year ended on the
on Account of—

NEW FOREST," per Act 8 & 9 Vict. c. 93. *Cr.*

EXPENDITURE.	Cash, &c.	Exchequer Bills.
	£. s. d.	£. s. d.
By Expenditure in 1854-5 - - - - - - - - - - - - - -	5 4 -	—
By Balances on the 31st of March 1855 - - - - - - - - - - - -	555 10 6	5,800 - -
£.	560 14 6	5,800 - -

IV.—ABSTRACT ACCOUNT, showing the RECEIPT and EXPENDITURE of the Commissioners 31st of March 1855,

Dr. "THE FUND for the Payment of Stipends of the Officiating MINISTERS of the PARISH the County of York,"

RECEIPT.	Cash.	Stock.
	£. s. d.	£. s. d.
To Balance on the 1st of April 1854	- - -	16,666 13 4
To Dividends of Stock	470 16 8	—
£.	470 16 8	16,666 13 4

V.—ABSTRACT ACCOUNT, showing the RECEIPT and EXPENDITURE of the Commissioners 31st of March 1855,

Dr. "THE FUND for MAINTAINING and REPAIRING the CHURCHES of Christchurch, per Act 5 &

RECEIPT.	CHRISTCHURCH.		HOLY TRINITY.		ST. PAUL.		CINDERFORD.	
	Cash.	Stock.	Cash.	Stock.	Cash.	Stock.	Cash.	Stock.
	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
To Balances on the 1st of April 1854	15 11 11	333 6 8	47 17 11	333 6 8	50 19 6	333 6 8	- 13 8	333 6 8
To Dividends of Stock, &c.	13 7 1	- -	13 7 1	- -	13 7 1	- -	11 6 3	—
To Balance on the 31st March 1855	- -	- -	- -	- -	- -	- -	10 8 11	—
Cash £.	28 19 -		61 5 -		64 6 7		22 8 10	
Stock £.		333 6 8		333 6 8		333 6 8		333 6 8

VI.—ABSTRACT ACCOUNT, showing the RECEIPT and EXPENDITURE of the Commissioners 31st of March 1855,

Dr. VOTE "SALARIES and EXPENSES

MISCELLANEOUS ESTIMATES, {1853–4. / 1854–5.} CLASS 2. VOTE 11.

	£. s. d.
To Balance on the 1st April 1854 (Net available)	338 8 3
To Amount granted for the Service of the Year 1854-5 (per Act 16 & 17 Vict. c. 110), and issued from the Exchequer	22,846 - -
£.	23,184 8 3

of Her Majesty's Woods, Forests and Land Revenues, for the Year ended on the
on Account of—

CHURCHES of NEWBOROUGH, in the County of Northampton, and SUNK ISLAND, in
per Act 1 Will. 4, c. 59. *Cr.*

EXPENDITURE.	Cash.	Stock.
	£. s. d.	£. s. d.
By Stipends paid to Ministers	470 16 8	—
By Balance on the 31st of March 1855	- - -	16,666 13 4
£.	470 16 8	16,666 13 4

of Her Majesty's Woods, Forests, and Land Revenues, for the Year ended on the
on Account of—

Holy Trinity, St. Paul, and Cinderford, in DEAN FOREST, in the County of Gloucester,"
6 Vict. c. 65. *Cr.*

EXPENDITURE.	CHRISTCHURCH.		HOLY TRINITY.		ST. PAUL.		CINDERFORD.	
	Cash.	Stock.	Cash.	Stock.	Cash.	Stock.	Cash.	Stock.
	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
By Expenditure in 1854–5	- -	- -	57 7 9	- -	19 15 2	- -	22 8 10	—
By Balances on the 31st of March 1855	28 19 –	333 6 8	3 17 3	333 6 8	44 11 5	333 6 8	- -	333 6 8
Cash £.	28 19 –		61 5 –		64 6 7		22 8 10	
Stock £.	333 6 8		- -	333 6 8	- -	333 6 8	- -	333 6 8

of Her Majesty's Woods, Forests, and Land Revenues, for the Year ended on the
on Account of—

in the Office of Woods, &c."

Cr.

MISCELLANEOUS ESTIMATES, {1853–4. / 1854–5.} CLASS 2. VOTE 11.

	Chargeable against		£. s. d.
	Estimate, 1853–4.	Estimate, 1854–5.	
By Expenditure in 1854–5; viz.—	£. s. d.	£. s. d.	
Salaries, &c.	87 10 –	11,889 1 6	11,976 11 6
Pay of Persons temporarily employed	307 4 –	1,003 4 8	1,310 8 8
Legal Expenses	159 5 11	7,580 6 –	7,739 11 11
Allowances to Clerks for extra Duty	- - -	60 – –	60 – –
Contingencies	31 5 9	1,011 15 3	1,043 1 –
£.	585 5 8	21,544 7 5	22,129 13 1
By BALANCE on the 31st of March 1855 (Net available)			1,054 15 2
		£.	23,184 8 3

VII.—GENERAL ABSTRACT of the Accounts of the Commissioners of Her Maje

BALANCES, 1st April 1854.					RECEIPTS.		Page of Account.	TITLES OF
SECURITIES.		PERSONS, &c.		CASH.	Securities Purchased.	CASH.		
Exchequer Bills.	Stock.	*Drs.*	*Crs.*					
£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.		LAND
500 – –	111,769 19 10	6,673 10 8	– – –	23,283 1 7	6,931 5 7	94,613 14 11 112,239 8 2 Securities sold.	2	– (Per Acts 10 Geo. 4,
—	—	31,795 – 6	11,698 9 7	36,169 16 10	– – –	383,756 15 1	4 to 6	– (Per Acts 10 Geo. 4,
3,800 – –	– – –	148 2 3	– – –	278 6 7	– – –	134 5 8	6	NEW FORE – – – (Per Act
—	16,666 13 4	– – –	– – –	– – –	– – –	470 16 8	8	CHURCHES at SUNK – – – (Per Act
—	1,333 6 8	– – –	– – –	115 3 –	– – –	51 7 6	8	CHURCHES – – – (Per Act
—	—	—	888 – –	1,226 8 3	– – –	22,846 – –	8	VOTE, SALARIES a – – – – (Per A
4,300 – –	129,769 19 10	38,616 13 5	12,586 9 7	61,072 16 3	6,931 5 7	614,112 8 –	£.	– – – –
			26,030 3 10 (Net Balance.)					
							1st April 1854.	
	£.	38,616 13 5	38,616 13 5		—	61,072 16 3	CASH – – – –	
					—	26,030 3 10	PERSONS, &c. – –	
					129,769 19 10	– – –	STOCK – – –	
					4,300 – –	– – –	EXCHEQUER BILLS	
				£.	141,001 5 5	701,215 8 1		

Woods, Forests, and Land Revenues, for the Year ended on the 31st of March 1855.

ACCOUNTS.	Page of Account.	PAYMENTS. CASH.	PAYMENTS. Securities Sold.	BALANCES, 31st March 1855. CASH.	PERSONS, &c. *Drs.*	PERSONS, &c. *Crs.*	SECURITIES. Stock.	SECURITIES. Exchequer Bills.
ENUE:		£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
AL and 14 & 15 Vict. c. 42) -	3	190,709 17 4 6,013 10 3 Securities purchased.	118,176 – 10	33,651 3 9	6,642 – –	206 16 –	525 4 7	500 – –
IE and 14 & 15 Vict. c. 42) -	5to7	122,132 16 3 272,571 16 8 Paid into the Consolidated Fund.	– – –	32,854 17 4	22,050 14 5	9,587 1 10	—	—
RAINAGE, &c. Vict. c. 93) - - -	7	5 4 –	– – –	383 10 7	171 19 11	– – –	– – –	3,800 – –
ND and NEWBOROUGH 1. 4, c. 59) - - -	9	470 16 8	– – –	– – –	– – –	– – –	16,666 13 4	—
EAN FOREST Vict. c. 65) - - -	9	99 11 9	– – –	66 18 9	– – –	– – –	1,333 6 8	—
PENSES in the Office of &c. ation Act) - - - -	9	22,129 13 1	– – –	1,702 5 6	106 14 5	754 4 9	—	—
- - - - - -	£.	614,133 6 –	118,176 – 10	68,658 15 11	28,971 8 9	10,548 2 7	18,525 4 7	4,300 – –
						18,423 6 2 (Net Balance.)		
31st March 1855.					£. 28,971 8 9	28,971 8 9		
CES CASH - - - -		68,658 15 11	—					
PERSONS, &c. - -		18,423 6 2	—					
STOCK - - -		– – –	18,525 4 7					
EXCHEQUER BILLS		– – –	4,300 – –					
	£.	701,215 8 1	141,001 5 5					

Examined.

(signed) *Alfred John Phipps*, Book-keeper.

(signed) CHARLES GORE { Commissioner of Her Majesty's Woods, Forests and Land Revenues.

Office of Woods, &c.
12 November 1855.

We, the Commissioners for Auditing the Public Accounts, do hereby certify, that these Accounts have been examined by Officers under our directions, and that, subject to the observations contained in our Report, dated 31st January 1856 (No. 44), accompanying these Accounts, the foregoing are correct statements of the Receipt and Expenditure for the Services in question for the Year 1854–55. Dated at the Audit Office, Somerset House, this 31st day of January 1856.

EDWD ROMILLY.
CHARLES ROSS.
W. L. MABERLY.

Examined.
H. T. D. Bathurst,
Inspector.

REPORT of the Commissioners of Audit, dated 31 January 1856.

(No. 44.)

My Lords, Audit Office, 31 January 1856.

In pursuance of the 39th section of 14 & 15 Vict. c. 42, we have the honour to transmit copies of Abstract Accounts, showing the Receipt and Expenditure of the Commissioners of Her Majesty's Woods, Forests, and Land Revenues, for the year ended 31st March 1855, on account of—

The Capital of the Land Revenue.

The Income of the Land Revenue.

Draining or otherwise improving the New Forest.

The Fund for the payment of Stipends of the Officiating Ministers in certain Churches in the Counties of Northampton and York.

The Fund for repairing certain Churches in Dean Forest.

The Vote for Salaries and Expenses in the Office of Woods.

£. 60. A sum of sixty pounds is charged under the last-mentioned head of service for payments to certain persons for extra services in the examination of the Welsh Rentals, which payments have not yet been provided for by Parliament. Having called for explanation of this expenditure, the Commissioners of Woods have transmitted to us a Treasury letter, dated 28th March 1855, by which they were authorized to include a sum of 262 *l.* 10 *s.* in the Estimate for the expenses of their office in the ensuing year to provide for the payment of the special service referred to, and in the mean time to make advances to the amount of 60 *l.* We are, however, informed, that the Estimates for 1855–6 having, at the date of the above Treasury Letter, been already prepared and submitted, the expenditure remains to be provided for in the Estimates for 1856–7.

There are several queries on the Account outstanding, some of them being connected with the Rentals, the delivery of which was not completed until the 19th instant. We beg leave to refer your Lordships to the last paragraph of our Report, dated 31st January 1855, No. 39 (laid before Parliament on 16th February 1855), as to the absence of replies to our queries, and also to our Report, dated 5th September 1855, No. 473, respecting the period of the delivery of the Monthly Accounts of this service.

We have, &c.

(signed) *Edw^d Romilly.*
Charles Ross.
W. L. Maberly.

The Lords Commissioners of Her Majesty's Treasury, &c. &c. &c.

Treasury Minute, dated 5 February 1856.

Transmit to the Commissioners of Woods, Extract of the Report of the Commissioners of Audit, relating to the delay in answering queries, for any observations they may wish to offer on the subject.

State that as the Report of the Commissioners of Audit must be laid before Parliament with the Abstract of the Account of the Board of Woods, &c., for the year ended 31st March 1855, my Lords will be glad to receive an early answer.

REPORT

REPORT of the COMMISSIONERS of WOODS, &c., dated 15 February 1856.

My Lords, Office of Woods, &c., 15 February 1856.

WE have to acknowledge the receipt of Mr. Wilson's letter of the 7th instant, enclosing an Extract from a Report of the Commissioners of Audit, dated the 31st ultimo, relating to the delay in answering certain outstanding queries on our Accounts for the year 1854-5; and requesting, as the Report in question must be laid before Parliament, that your Lordships may receive an early reply.

The Monthly Accounts of this Department for the year 1854-5, were rendered to the Commissioners of Audit at various periods, according to the date at which each Account was completed. The Accounts for the six months ending on the 30th September 1854, were forwarded to that Department on or before the 19th of April 1855. The Accounts for the six remaining months in the year, were rendered at different times, on or before the 30th August 1855.

As the period within which the Commissioners of Audit are required to certify as to the correctness or otherwise of the Abstract Accounts of this Department extends to the 31st of January, it follows that those Commissioners had one moiety of the year's Accounts before them during a period of upwards of nine months prior to that date, and the other moiety during a period of five months.

The total number of queries raised on the Account for 1854-5, was 129; and we find on inquiry that 44 of these were sent to this office before the end of August. In the following four months, during which the Commissioners of Audit had the whole of the year's Accounts before them, with the exception of the Rentals hereinafter referred to, only 27 additional queries were received in this office; but in the succeeding month (January), and at different times within three weeks of the expiration of the period allowed to the Commissioners of Audit for the completion of their Report, not less than 58 queries were received; and we beg further to call your Lordships' attention to the circumstance, that 27 of these queries, or upwards of one-fifth of the whole number of queries raised on the Account for the year, were not received at this office until one week prior to the expiration of the period alluded to.

Some of these queries called for information which could only be supplied by the local officers, and it was in some cases obviously impossible that replies could be furnished on or before the 31st of January; but due exertions were made to furnish the Audit Board with the required information; and although from circumstances over which we had no effectual control, a delay did occur in a few instances in answering some of the earlier queries, we have now to state that with one exception the queries on the Account for 1854-5, outstanding on the 31st ultimo, were answered on or before the 8th instant.

It may be necessary to add that the queries are despatched by the Audit Board in sheets, containing from one to eight or ten queries in each set; and as that Board require the answers to be written on the original sheets, which must then be returned to them, it frequently occurs that the absence of the information requisite for the reply to a single query will detain the transmission of a whole set of replies for a considerable period.

Having thus submitted to your Lordships an explanation respecting the queries remaining unanswered prior to the 31st ultimo, we think it right to add a statement in reference to the observation of the Commissioners of Audit, to the effect that the delivery of the Rentals was not completed until the 19th of that month.

The Rentals of four of the local officers were not sent with the account for March, which was delivered in August last, but one of the Rentals was forwarded shortly afterwards, at a date of which no record was kept; two others, portions of which were in constant use in this office, were sent on the requisition of the Audit Board on the 31st December; and the fourth, which could not be found on the receipt of the requisition, and was supposed, in the absence from illness of the officer who had examined it, to have been already sent to the Audit Office, was finally forwarded on the 17th January.

This last mentioned Rental is of comparatively slight importance, inasmuch as the charge is less than 500 *l.* a year.

Under these circumstances, we beg to submit to your Lordships, that the Report of the Commissioners of Audit, although it may be strictly correct, is nevertheless calculated to convey an erroneous impression as to the nature and extent of the arrears which were pending when their Report was transmitted to your Lordships.

We are, &c.

(signed) *Charles Gore.*
James Howard.

The Right Hon. the Lords Commissioners of Her Majesty's Treasury.

Treasury Minute, dated 19 February 1856.

Write to the Commissioners of Audit with reference to their Report of the 31st ultimo, covering an Abstract of the Accounts of the Commissioners of Woods, &c., for the year 1854-5, to be laid before Parliament, that my Lords thought it right to transmit copy of the same to the Commissioners of Woods, in order that those Commissioners might be afforded an opportunity of furnishing any explanations which they might wish to make, in order to their being at the same time communicated to Parliament, on the observations contained in the Report of the Commissioners of Audit.

My Lords direct that the reply of that Board be transmitted to the Commissioners of Audit for any further remarks which they may have to offer on the subject.

Request an early reply, and that the Report of the Commissioners of Woods be returned.

Further REPORT of the Commissioners of Audit, dated 28 February 1856.

(No. 97.)

My Lords, Audit Office, 28 February 1856.

We have the honour to acknowledge the receipt of Sir Charles Trevelyan's letter of the 20th instant, transmitting, for any remarks we may have to offer thereon, a Report of the Commissioners of Her Majesty's Woods, &c., dated 15th instant, with reference to our Report upon their annual classified Abstract Account for 1854-5.

No. 2736.

The Commissioners of Woods state, that their Accounts for the six months ended 30th September 1854, were delivered on or before the 19th April 1855, and that the Accounts for the remaining six months of the year were rendered at different times, on or before the 30th August 1855; but we have to observe, that the Account for April 1854 was not received until the 20th February 1855, being the tenth month after the period to which it relates; the remaining five months' Accounts were received as follows: those for the months of May, June and July on the 6th, 19th and 30th March respectively, and those for August and September on the 11th and 21st April respectively; thus the Accounts for the whole six months were received within the two months intervening between the 20th February and the 21st April.

And with respect to the remaining six months' Accounts, which it is stated were delivered at different times before the 30th August last, they were all received in our office between the 13th and 31st of that month.

It is stated, in the Report of the Commissioners of Woods, that one moiety of the year's Accounts was before us during a period of nine months prior to the 31st of January, and the other moiety during five months. But we have to observe, that the delivery of Accounts for several months nearly simultaneously, necessarily interferes with the course of business in this office, and with the due and speedy examination of such Accounts. It is, in principle, a return to the system of Annual Accounts which formerly prevailed, and which at our suggestion was discontinued under your Lordships' sanction, upon a consideration of the great advantages of a regular monthly delivery and examination of Cash Accounts, as set forth in the Enclosure in our Report of the 17th November 1848, No. 642.

The main objects for requiring a monthly delivery of Accounts are—first, that the Accounts may be kept regularly day by day, and week by week; and, secondly, that the examination of them may be proceeded with, *pari passu*, with the transactions of the Accountant; and the very circumstance that so large a number of queries should have arisen upon these Accounts (which ought to be rendered in a complete state with their supporting documents), shows the importance of not deviating from the rule to which we have adverted. And in our Report to your Lordships of the 5th of September last (No. 473), we submitted, with a view to our being enabled satisfactorily to comply with the Act of Parliament, that each monthly Account should be delivered not later than four months after the period to which each Account refers.

With regard to 27 queries only having been sent during the four months (September to December 1855), we beg to observe, that the examination of the Accounts was in progress during that period, and a day having been fixed by the Legislature before which the examination must be completed, it has been considered preferable not to defer the examination of any portion of the Account, in order that queries may be prepared and forwarded to the Accountants, but to press forward the examination, in order that every transaction may be investigated within the limited time.

The 27 queries referred to as having been sent one week prior to the 31st January, arose on the various Rentals, the comparison of the Rentals with those of the previous years being the last portion of the examination of the Accounts.

The

The queries are no doubt sent in sets, containing from 1 to 10 in each set, but they are classed with a view to each set containing such queries as relate, so far as we have the means of judging, to the transactions of one and the same officer or department under the Commissioners of Woods, in order to obviate the necessity of any set of queries being referred to two or more persons for their explanations; and in the event of our not always succeeding in this object, there could, we apprehend, be no difficulty in making a copy of the one or two queries which required special reference to an officer at a distance from London, and not delaying the re-transmission of the other queries which had already been satisfactorily answered.

We beg leave to return the Report of the Commissioners of Her Majesty's Woods, &c.

And have, &c.

(signed) *Edw^d Romilly.*
Henry Arbuthnot.
R. Vaughan Davis.

The Lords Commissioners of Her Majesty's Treasury, &c. &c. &c.

Further TREASURY MINUTE, dated 29 February 1856.

TRANSMIT copy of this Report to the Commissioners of Woods, with reference to their Report of the 15th instant, and request their attention to the importance of a regular transmission of the Monthly Accounts to the Commissioners of Audit, in order that the examination may proceed with uniformity.

Further REPORT from the COMMISSIONERS of WOODS, &c., dated 3 March 1856.

(773/56.)

My Lords, Office of Woods, &c., 3 March 1856.

WE have to acknowledge the receipt of Mr. Wilson's letter of the 1st instant, enclosing a Copy of a Report, dated the 28th ultimo, furnished by the Commissioners of Audit, further on the subject of the Abstract Accounts of this Department for 1854–5.

Your Lordships are aware that the Commissioners of Audit are required, by the 37th section of the 14th & 15th Vict., c. 42, to certify these Abstract Accounts on or before the 31st of January in each year; and, in transmitting their Certificate on the Accounts for the year 1853–4, the Commissioners of Audit acquainted your Lordships, in a Report which was subsequently laid before Parliament, in pursuance of the 39th section of the above-mentioned Act, that, in the absence of replies to their queries, they had not the means of satisfactorily discharging the duty imposed upon them by Parliament.

On the 31st of January last, the Commissioners of Audit forwarded to your Lordships their Certificate on our Accounts for the following year (1854–5), and in so doing they took the opportunity of stating that there were several queries outstanding; and they referred your Lordships to the remarks which had been made in their Report for the preceding year, respecting the absence of replies to their queries.

Your Lordships having referred to us the last-mentioned Report for any explanation which we might have to offer, we submitted a statement, showing the length of time during which our Accounts for the year 1854–5 were before the Commissioners of Audit, and the delay which took place on the part of that Department in furnishing us with the queries arising theron. We also represented to your Lordships that, as very nearly one-half of the whole number of queries which arose on the Accounts for the year were not sent to this Office until within three weeks of the expiration of the period allowed to the Commissioners of Audit for the issue of their Certificate, it was impossible that replies could be furnished prior to the date fixed by the Legislature for the issue of that document.

In reply to those observations, the Commissioners of Audit have now informed your Lordships, in explanation of the delay which took place in forwarding the queries to this Office, that it was considered preferable to press forward the examination of the Account rather than to prepare and forward to us the queries in question.

From the foregoing statement, your Lordships will gather that, in the first place, the Commissioners of Audit were of opinion, on the 31st of January 1855, that, in the absence of replies to their queries, they had not the means of satisfactorily discharging the duty imposed upon them by Parliament in the examination of our Abstract Accounts; and that, nevertheless, in the examination of the Accounts of the succeeding year, they delayed the transmission of the queries until it was clearly impossible that they could be answered

within the period fixed by the Legislature for the completion of the Report of the Commissioners of Audit.

In the second place, your Lordships will observe, that the Accounts for the first half of the year 1854–5 were before the Commissioners of Audit for Nine clear Months, and those for the last half of the year (with the exceptions mentioned in our former Report) for Five clear Months before the day fixed for the issue of their Certificate; that, by the mode of examination adopted by that Department, a large proportion of the queries were withheld until within Three Weeks of that day, and that the Commissioners of Audit, nevertheless, in a Report required by the Act 14 & 15 Vict., c. 42, to be laid before Parliament, referred your Lordships to their former statement, that the absence of our replies to these queries prevented the satisfactory discharge of their duty.

In submitting these observations upon complaints made by the Board of Audit, and which, for the reasons we have given, appear to us to be not well founded, we think it right to add, that we entirely concur with the Commissioners of Audit as to the expediency of a regular transmission of our Monthly Accounts; and that exertions have been and will continue to be made to comply with their wishes in that respect; in proof of which, we may state that, as the Account for October will be transmitted to their Office on Thursday next, they will then have before them Seven Monthly Accounts relating to the current Financial Year, which will not expire until the 31st of the present month.

We are, &c.

(signed) *Charles Gore.*
James Howard.

The Right Hon. the Lords Commissioners
of Her Majesty's Treasury.

WOODS, FORESTS, AND LAND REVENUES.

1854–5.

ABSTRACT ACCOUNTS

OF THE

COMMISSIONERS OF HER MAJESTY'S WOODS, FORESTS, AND LAND REVENUES,

For the Year ended 31st March 1855,

&c.

(Presented in pursuance of the 37th Section of the Act 14 & 15 Vict. c. 42.)

Ordered, by The House of Commons, *to be Printed,*
4 *March* 1856.

79.

Under 3 *oz.*

17

WORKS AND PUBLIC BUILDINGS.

1854-5.

ABSTRACT ACCOUNTS of the RECEIPT and EXPENDITURE of the MONEYS Granted or otherwise Received and Appropriated in the Department under the Control or Management of the COMMISSIONERS of HER MAJESTY'S WORKS AND PUBLIC BUILDINGS, in the Year ended 31st March 1855; together with REPORTS of the COMMISSIONERS of AUDIT, dated 31st January 1856; also TREASURY MINUTE thereon, dated 5th February 1856, and Reply from the FIRST COMMISSIONER of WORKS, dated 12th February 1856.

(PRESENTED PURSUANT TO ACT 14 & 15 VICT. c. 42, s. 38.)

Ordered, by The House of Commons, *to be Printed,*
22 *February* 1856.

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WORKS AND PUBLIC BUILDINGS.

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ABSTRACT ACCOUNTS of the Receipt and Expenditure of the Moneys Granted or otherwise
Commissioners of Her Majesty's Works and Public

VOTES OF PARLIAMENT. - - - - - - -

MISCELLANEOUS ESTIMATES. - - - - - - -

Note.—It is to be observed, as to Moneys Voted, that the Debit Side of this Account shows the Amount Voted for the Year
Year, and partly upon

Dr.

HEADS OF SERVICE.		£. s. d.	Receipts in 1854–55. £. s. d.
Royal Palaces and Public Buildings. Class I.—Vote 1.	Balance, 1st April 1854	67,300 7 2	
	Grant for the Year 1854–55	135,863 – –	
	Transferred from Vote "Buckingham Palace, South Wing."—[*See* page 5]	3,915 2 8	
	Transferred from Vote "Statue of King Charles the First."—[*See* page 13]	40 – –	
	Transferred from Account of Indian Law Commission.—[*See* page 39]	14 12 6	
	Amount of Orders for payment drawn in 1853–54 cancelled	11 5 3	
	Net Receipts from Fees paid by Visitors to Holyrood Palace and Chapel	157 – 8	
	Extra Receipts arising from Sale of Old Materials, &c.	3,281 16 5	
			210,583 4 8
Buckingham Palace, South Wing. Class 1.—Vote 2.	Balance, 1st April 1854	4,266 8 9	
	Grant for the Year 1854–55	19,437 – –	
	Produce of 4,000 *l.* Exchequer Bills sold.—[*See* below]	4,088 16 8	
	Interest of Exchequer Bills	227 11 4	
			28,019 16 9
	Exchequer Bills:	£. s. d.	
	Balance, 1st April 1854	13,200 – –	
	Bills sold in 1854–55 (as above)	4,000 – –	
	Balance of Exchequer Bills, 31st March 1855	£. 9,200 – –	
	Carried forward - - - £.		238,603 1 5

Received and Appropriated in the Department under the Control or Management of the Buildings, in the Year ended 31st March 1855.

- - - - - - - - VOTES OF PARLIAMENT.

- - - - - - - - MISCELLANEOUS ESTIMATES.

and the Credit Side of the Account the Sums Paid on account of Services chargeable partly upon the Vote for the the Estimates of previous Years.

Cr.

HEADS OF SERVICE.		£. s. d.	Expenditure in 1854–55. £. s. d.	Balances on 31st March 1855. £. s. d.
Royal Palaces and Public Buildings. Class 1.—Vote 1.	Maintenance and Repairs of Royal Palaces; viz.:			
	Palaces, &c. in the personal occupation of Her Majesty £. 25,241 18 –			
	Palaces, &c. partly in the personal occupation of Her Majesty - - - - £. 2,786 6 9			
	Palaces, &c. not in the personal occupation of Her Majesty - - - - £. 18,999 1 11			
		47,027 6 8		
	Maintenance and Repairs of Public Buildings and Offices - - - - - - - -	39,610 17 5		
	Rates, Taxes, Lighting, Supply of Water, Watching, &c. - - - - - - - -	5,190 15 1		
	Rents of Buildings hired for public purposes -	19,328 – 7		
	Supply and Repairs of Furniture - - -	25,586 11 3		
	Isle of Man Buildings - - - - - -	145 1 3		
	Royal, Public, and Ecclesiastical Buildings, Scotland - - - - - - - - -	6,993 7 1		
	British Ambassador's House, Paris - - -	204 13 1		
	Windsor Town Improvements; viz.: £. s. d.			
	Balance overdrawn on account to 31 March 1854 [page 22] - £. 393 16 8			
	Expenditure in 1854–55 - - £. 3,851 4 1			
		4,245 – 9		
	Expenses connected with the Measurement of Works, and other Payments chargeable upon the Vote generally - - - - - -	1,272 7 5		
	Amount paid to the Exchequer on account of Extra Receipts in 1853–54 - - - - -	770 10 9		
			150,374 11 4	60,208 13 4
Buckingham Palace, South Wing. Class 1.—Vote 2.	Works, &c. - - - - - - - - -	16,028 4 9		
	Paid William Theed, Esq., on account of Contracts with him for the execution of Bas Reliefs, Statues, &c. - - - - - -	825 – –		
	Architect's Commission (on account) - -	500 – –		
	Transferred to Vote "Palaces and Public Buildings" [*see* page 4] in repayment of Expenditure in 1853–54, chargeable upon this Vote	3,915 2 8		
			21,268 7 5	6,751 9 4
	Carried forward - - £.		171,642 18 9	66,960 2 8

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—VOTES OF PARLIAMENT—MISCELLANEOUS ESTIMATES—*continued*.

Dr.

HEADS OF SERVICE.			£. s. d.	Receipts in 1854–55. £. s. d.
		Brought forward - - -	- - -	238,603 1
Royal Parks and Pleasure Gardens. Class 1.—Vote 3.	Balance, 1st April 1854 - - - - - - - - -		11,772 8 9	
	Grant for 1854–55.	£. s. d.		
	St. James's, &c. Parks - -	15,866 18 3		
	Ditto (Department of the Ranger)	1,482 18 7		
	Kensington Gardens - -	2,280 15 5		
	Chelsea Hospital Grounds -	759 1 7		
	Ditto (Special Service) - -	1,500 – –		
	Regent's Park - - -	6,248 11 4		
	Victoria Park - - - -	3,369 7 8		
	Greenwich Park - - -	1,366 16 –		
	Ditto (Department of the Ranger)	867 10 –		
	Royal Botanic Gardens, Kew -	9,643 4 –		
	Royal Pleasure Grounds, Kew -	1,359 12 –		
	Penitentiary Road - - -	235 15 –		
	Albert Road, Regent's Park -	836 19 –		
	Richmond Park - - -	2,403 18 2		
	Ditto (Department of the Ranger)	2,843 6 –		
	Bushy Park - - - -	1,967 7 8		
	Hampton Court Park - -	929 10 8		
	Hampton Court Pleasure Gardens	2,363 – –		
	Hampton Court Roads - -	566 18 8		
	Richmond and Kew Roads -	1,196 – –		
	Holyrood Park - - -	871 8 –		
	Phœnix Park - - - -	4,507 9 –		
	Kennington Common - -	753 13 –		
	Ditto (Special Services) - -	2,365 – –		
			66,585 – –	
	Amount of Orders for payment drawn prior to 1 April 1854, cancelled - - - - - - - - - -		55 15 9	
	Extra Receipts arising from Ground Rents, Contributions for the use of Keys of the Ornamental Gardens in the Royal Parks and Pleasure Gardens, Profits of Herbage, &c. - - -		*8,366 17 4	36,780 1 10
	* *Note*—For a detailed statement of such of these Extra Receipts as are payable to the Exchequer, *see* pages 42 to 45.			
New Houses of Parliament. Class 1.—Vote 4.	Balance, 1st April 1854 - - - - - - - - -		23,007 5 1	
	Grant for the Year 1854–55 - - - - - - - -		137,294 – –	
	Amounts voted in the Years 1853–54 and 1854–55 for Frescoes in the Queen's Robing Room, payment for which is made by the Department of Works, &c. - - - - - - - -		1,800 – –	
	Extra Receipts - - - - - - - - - -		569 14 11	
				162,671 – –
		Carried forward - - - £.		438,054 3 3

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—VOTES OF PARLIAMENT—MISCELLANEOUS ESTIMATES—*continued.*

Cr.

HEADS OF SERVICE.			Expenditure in 1854–55.	Balances on 31st March 1855.
			£. s. d.	£. s. d.
	Brought forward - -		171,642 18 9	66,960 2 8
		£. s. d.		
Royal Parks and Pleasure Gardens. Class 1.—Vote 3.	St. James's, &c. Parks - - - - - -	12,773 19 3		
	Ditto (Department of the Ranger) - - -	1,504 9 3		
	Kensington Gardens - - - - -	2,436 3 3		
	Chelsea Hospital Grounds - - - -	462 16 6		
	Ditto (Special Service) - - - - -	460 5 10		
	Regent's Park - - - - - - -	6,258 3 10		
	Victoria Park - - - - - - - -	2,754 14 1		
	Greenwich Park - - - - - - -	1,251 6 8		
	Ditto (Department of the Ranger) - - -	266 8 7		
	Royal Botanic Gardens, Kew - - - -	9,222 8 -		
	Royal Pleasure Grounds, Kew - - - -	1,358 3 -		
	Penitentiary Road - - - - - - -	195 4 9		
	Albert Road, Regent's Park - - - -	815 12 3		
	Richmond Park - - - - - - -	2,923 12 2		
	Ditto (Department of the Ranger) - - -	2,319 3 4		
	Bushy Park - - - - - - - -	1,991 6 1		
	Hampton Court Park - - - - -	1,195 4 5		
	Hampton Court Pleasure Gardens - - -	2,400 4 11		
	Hampton Court Roads - - - - -	606 10 7		
	Richmond and Kew Roads - - - -	1,352 4 8		
	Holyrood Park - - - - - - -	814 15 -		
	Phœnix Park - - - - - - -	4,507 8 10		
	Kennington Common - - - - - -	2,737 7 2		
	Amount paid to the Exchequer on account of Extra Receipts in 1853–54 - - - -	395 17 5		
	Payments chargeable upon Extra Receipts, per contra - - - - - - - - -	1,814 19 4		
			62,818 14 2	23,961 7 8
New Houses of Parliament. Class 1.—Vote 4.	Works (under Sir C. Barry), Fittings, Furniture, &c. - - - - - - - -	96,750 19 1		
	Maintenance of Building, Warming, Ventilating, &c. - - - - - - - -	21,708 16 4		
	Repair of Furniture, Supply of Hair-cloth Mats, &c., required for Ventilation Works - -	4,195 17 -		
	Rents, Rates, &c. - - - - - - -	1,079 15 -		
	Paid Wm. Dyce, Esq., R. A., on account of Frescoes in the course of execution by him in the Queen's Robing-room - - - - - -	800 - -		
	Expense incurred, in consideration of Rent received, in adapting a portion of the Thames Bank Workshops, let to Col. Colt, for a Manufactory of Small Arms - - - - -	161 4 3		
	Paid to the Exchequer on account of Extra Receipts in 1853–54 - - - - - - -	142 10 7		
	Amount issued to the Lords of the Treasury on account of Services relating to the Decoration of the Palace - - - - - - - -	729 - -		
			125,568 2 3	37,102 17 9
	Carried forward - - - £.		360,029 15 2	126,024 8 1

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—VOTES OF PARLIAMENT—MISCELLANEOUS ESTIMATES—*continued.*

Dr.

HEADS OF SERVICE.				Receipts in 1854-55.
			£. s. d.	£. s. d.
		Brought forward - - -		488,054 3 3
Stationery Office. Class 1.—Vote 5.	Balance, 1st April 1854 - - - - - - - - - -		14,789 7 3	
	Grant for the Year 1854-55 - - - - - - - -		10,000 - -	
				24,789 7 3
General Repository for Public Records. Class 1.—Vote 6.	Balance, 1st April 1854 - - - - - - - -		13,404 19 6	
	Grant for the Year 1854-55 - - - - - - -		10,000 - -	
				23,404 19 6
Holyhead Harbour, &c. Class 1.—Part Vote 7.	Balance, 1st April 1854 - - - - - - - -		11,394 10 10	
	Grant for the Year 1854-55 - - - - - - -		486 - -	
	Extra Receipts, arising from the Harbour and Dock Dues, Coach Tolls, &c.; viz.:	£. s. d.		
	Holyhead Harbour - - - -	795 - 2		
	Shrewsbury and Holyhead Road - -	4,511 12 1		
	Menai Bridge - - - - - -	25 9 2		
			5,332 1 5	
				17,212 12 3
Salaries and Expenses of the Office of Works, &c. Class 2.—Vote 10.	Balance, 1st April 1854—[*See* below.]			
	Grant for the Year 1854-55 - - - - - - -		20,124 - -	
	Extra Receipts - - - - - - - - - -		694 13 7	
		£.	20,818 13 7	
	Deduct, overdrawn Balance, 1st April 1854 - - - -		451 4 7	
				20,367 9 -
British Museum Buildings. Class 4.—Vote 11. (1.)	Balance, 1st April 1854 - - - - - - - -		9,823 - -	
	Grant for the Year 1854-55 - - - - - - -		101,142 - -	
				110,965 - -
Battersea Park. Class 7.—Vote 9.	Balance, 1st April 1854 - - - - - - - -		14,301 8 4	
	Grant for the Year 1854-55 - - - - - - -		25,500 - -	
	Rents - - - - - - - - - - -		139 15 8	
	Proceeds of Sale of Building Materials, &c. - - - -		1,251 3 3	
	Amount of Order for Payment drawn in 1853-54, cancelled		150 - -	
				41,342 7 3
		Carried forward - - - £.		726,135 18 6

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—VOTES OF PARLIAMENT—MISCELLANEOUS ESTIMATES—*continued.*

Cr.

HEADS OF SERVICE.		£. s. d.	Expenditure in 1854-55. £. s. d.	Balances on 31st March 1855. £. s. d.
	Brought forward - - -		360,029 15 2	128,024 8 1
Stationery Office. Class 1.—Vote 5.	Works, &c. - - - - - - - - -	16,020 - -		
	Salary and Disbursements of Clerk of Works -	233 9 -		
	Paid to the Exchequer on account of Extra Receipts in 1853–54 - - - - - -	289 7 3		
			16,542 16 3	3,246 11 -
General Repository for Public Records. Class 1.—Vote 6.	Works, &c. - - - - - - - - -	6,559 3 -		
	Salary and Disbursements of Clerk of Works -	168 9 -		
	Miscellaneous Payments - - - - -	145 - 8		
			6,872 12 8	16,532 6 10
Holyhead Harbour, &c. Class 1.—Part Vote 7.	Holyhead Harbour - - - - -	2,022 14 -		
	Shrewsbury and Holyhead Road - - -	4,490 16 10		
	Menai Bridge (Repairs Account) - - -	220 13 4		
	Conway Bridge - (ditto) - - - -	106 1 2		
			6,840 5 4	10,372 6 11
Salaries and Expenses of the Office of Works, &c. Class 2.—Vote 10.	Salaries of the Establishment - - - -	14,497 11 3		
	Law Expenses, including Salaries and Expenses of the Solicitor's Department - - -	5,009 3 11		
	Law Stationer's Clerks - - - - -	460 6 9		
	Postage and Office Contingencies - - -	654 12 -		
	Paid to the Exchequer, on account of Extra Receipts, in 1853–54 - - - - - -	39 4 11		
			20,660 18 10	293 9 10 overdrawn.
British Museum Buildings. Class 4.—Vote 11 (1).	New Buildings, Works, &c. - - - -	8,169 11 11		
	Ditto - - Fittings, &c. - - - -	10,279 5 2		
	Additional Buildings, Works - - - -	15,980 - -		
	Architect's Commission - - - - -	1,721 8 9		
	Clerk of Works' Salary, Porters' Wages, &c. -	182 15 6		
		36,333 1 4		
	Amount issued to the Lords of the Treasury, in 1851, for payment to R. Westmacott, Esq., for a Sculptured Pediment, not previously credited - - - - - - - - -	1,630 - -		
			37,963 1 4	73,001 18 8
Battersea Park. Class 7.—Vote 9.	Purchases of Property - - - - -	29,241 2 6		
	Rent of Property purchased, and Interest of Purchase-money - - - - - -	669 - 4		
	Charges attending the purchase of Property -	1,580 2 8		
	Labour and Materials for formation of the Park, and Approaches and Repairs of River Bank -	5,103 10 11		
	Engineer's Charges, 184 *l.* 18 *s.* 5 *d.*; Architect's Commission (on account), 500 *l.* - - -	684 18 5		
	Clerk of Works' Salary and Disbursements -	166 18 9		
	Miscellaneous Payments, Rates, Taxes, &c. -	213 4 8		
			37,658 18 3	3,662 9 -
	Carried forward - - - £.		486,568 7 10	239,861 - 6

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—VOTES OF PARLIAMENT—MISCELLANEOUS ESTIMATES—*continued*.

Dr.

HEADS OF SERVICE.		£. s. d.	Receipts in 1854–55. £. s. d.
	Brought forward - - -	- - -	726,135 18 6
Chelsea Bridge. Class 8.—Vote 5. 1853–54.	Balance, 1st April 1854 - - - - - - - - -	8,759 3 7	
	Produce of 1,000 *l.* Exchequer Bills sold [*see* below] - - -	1,020 4 4	
	Interest of Exchequer Bills - - - - - - -	914 17 7	
			10,694 5 6
	EXCHEQUER BILLS:		
	Balance, 1st April 1854 - - - - £. 37,200		
	Bills sold in 1854–55 (as above) - - - 1,000		
	Balance of Exchequer Bills, 31st March 1855 - - - - £. 36,200		
Chelsea Embankment and Public Roadway. Class 7.—Vote 10.	Balance, 1st April 1854 - - - - - - - -	35,270 6 2	
	Grant for the Year 1854–55 - - - - - - -	35,000 - -	
	Produce of Sale of 1,000 *l.* Exchequer Bills sold [*see* below] -	1,025 19 7	
	Interest of Exchequer Bills - - - - - - -	133 15 10	
	Proceeds of Sale of Building Materials - - - - -	288 - 3	
			71,718 1 10
	EXCHEQUER BILLS:		
	Balance, 1st April 1854 - - - - £. 5,300		
	Bills sold in 1854–55 (as above) - - - 1,000		
	Balance of Exchequer Bills, 31st March 1855 - - - - £. 4,300		
British Ambassador's House, Paris. Class 7.—Vote 11.	Balance, 1st April 1854 - - - - - - - -	1,524 17 -	
	Grant for the Year 1854–55 - - - - - - -	3,393 - -	
			4,917 17 -
Burlington House, Piccadilly. Class 7.—Vote 20.	Grant for the Year 1854–55 - - - - - - - -	- - -	140,000 - -
British Ambassador's House, Constantinople. Class 7.—Vote 5. 1850–51.	Balance, 1st April 1854 - - - - - - - -	- - -	2,825 - 1
British Consulate, Constantinople. Class 7.—Vote 21.	Grant for the Year 1854–55 - - - - - - -	- - -	10,000 -
	Carried forward - - - £.		966,291 2 11

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—VOTES OF PARLIAMENT—MISCELLANEOUS ESTIMATES—*continued.*

Cr.

HEADS OF SERVICE.			Expenditure in 1854–55.	Balances on 31st March 1855.
			£. s. d.	£. s. d.
	Brought forward - - -		456,568 7 10	239,861 – 6
Chelsea Bridge. Class 8.—Vote 5. 1853-54.	Works - - - - - - - - -	10,022 12 5		
	Engineer's Commission, 159 *l.* 13 *s.* 8 *d.*; Travelling and Incidental Expenses (on account), 400 *l.* - - - - - - - -	559 13 8		
	Salary and Disbursements of Resident Engineer, 128 *l.* 12 *s.* 7 *d.*; Salary of Superintendent of Works, 250 *l.* - - - - -	378 12 7		
	Miscellaneous Payments - - - - -	20 4 –		
			10,981 2 8	286 17 2 overdrawn.
Chelsea Embankment and Public Roadway. Class 7.—Vote 10.	Works - - - - - - - - -	9,778 11 5		
	Purchases of Property - - - - - -	16,500 – –		
	Iron Railing on Roadway (Balance of Contract)	672 – –		
	Ground Rent, 75 *l.*; Purchase of Trees and Plants, 79 *l.* 16 *s.* 6 *d.* - - - - - -	154 16 6		
	Engineer's Commission - - - - -	794 19 2		
	Salary and Disbursements of Resident Engineer	124 14 1		
	Ditto - - of Superintendent of Works	210 17 2		
	Miscellaneous Payments - - - - -	189 14 4		
			28,425 12 8	43,292 9 2
British Ambassador's House, Paris. Class 7.—Vote 11.	Works and Furniture - - - - - -	1,946 13 10		
	Architect's Commission and Expenses - -	334 1 6		
	Paid to the Exchequer, Extra Receipts in 1853-54 - - - - - - - -	23 15 5		
			2,304 10 9	2,613 6 3
Burlington House, Piccadilly. Class 7.—Vote 20.	Purchase Money of Burlington House - -	140,000 – –		
	Stamp Duty on Conveyance - - - -	700 – –		
	Architect's Commission and Salary of Drawing Clerk - - - - - - - -	278 – –		
			140,978 – –	978 – – overdrawn.
British Ambassador's House, Constantinople. Class 7.—Vote 5. 1850-51.	Works, Furniture, &c. - - - - - -	2,107 18 9		
	Salary, Travelling Expenses, &c., of Architect and Clerks of Works - - - - - -	375 18 11		
			2,483 17 8	341 2 5
British Consulate, Constantinople. Class 7.—Vote 21.	Works, &c. - - - - - - - - -	4,076 13 5		
	Architect's Commission (on account) - -	200 – –		
	Clerk of Works' Salary and Expenses of Passage out to Constantinople - - - - -	230 – –		
			4,506 13 5	5,493 6 7
	Carried forward - - - £.		676,248 5 –	291,601 4 11

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—VOTES OF PARLIAMENT—MISCELLANEOUS ESTIMATES—*continued.*

Dr.

HEADS OF SERVICE.					Receipts in 1854–55.
				£. s. d.	£. s. d.
			Brought forward - - -		966,291 2 11
Embassy Chapel, Constantinople. Class 7.—Vote 22.	Grant for the Year 1854–55 - - - - - - - - - - -				2,055 - -
British Protestant Cemetery, Madrid. Class 7.—Vote 23.	Grant for the Year 1854–55 - - - - - - - - - - -				1,400 - -
Westminster Abbey. (Royal Monuments.) Class 7.—Vote 24.	Grant for the Year 1854–55 - - - - - - - - - - -				2,500 - -
Statue of King Charles the First, Charing Cross. Class 7.—Vote 25.	Grant for the Year 1854–55 - - - - - - - - - - -				1,000 - -
Duchy of Cornwall New Office. Class 8.—Vote 2.	Grant for the Year 1854–55 - - - - - - - -			16,889 - -	
	Amount received from the Commissioners of Inland Revenue on account of the Preliminary Expenses connected with the Transfer of Offices - - - - - - - -			300 - -	
					17,189 - -
Geological Survey, &c.	Commissioners of Works, &c. Vote. Class 4.—Vote 14. 1852–53.	Balance, 1st April 1854 -	£. s. d. 123 3 3	£. s. d.	
		Amount received from the Lords of the Treasury, in reimbursement of part of the Amount transferred to the Board of Trade in 1853–54 - -	3,985 19 11		
		Amount over-credited in Account, Year 1849–50 - -	100 - -		
				4,209 3 2	
	Board of Trade. Class 4.—Part Vote 3. 1853–54.	Balance, 1st April 1854 - - - - -		1,651 10 -	
					5,860 13 2
			Carried forward - - - £.		996,295 16 1

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—VOTES OF PARLIAMENT—MISCELLANEOUS ESTIMATES—*continued.*

Cr.

HEADS OF SERVICE.				Expenditure in 1854–55.	Balances on 31st March 1855.
				£. s. d.	£. s. d.
		Brought forward - - -		676,248 5 –	291,601 4 11
Embassy Chapel, Constantinople. Class 7.—Vote 22.	Balance, 31st March 1855 - - - - - - - -			- - -	2,055 – –
British Protestant Cemetery, Madrid. Class 7.—Vote 23.	Architect's Commission (on account) - - - - -			150 – –	1,250 – –
Westminster Abbey, (Royal Monuments). Class 7.—Vote 24.	Balance, 31st March 1855 - - - - - - - - -			- - -	2,500 – –
Statue of King Charles the First, Charing Cross. Class 7.—Vote 25.	Transferred to Vote for "Palaces and Public Buildings" (page 4), in repayment of amount advanced from that Service in 1853–54, to defray cost of Plaster Casts of decayed portions of the Statue - - - - - - - - - -			40 – –	960 – –
			£. s. d.		
Duchy of Cornwall New Office. Class 8.—Vote 2.	Purchase-money of Site of New Office - -		4,300 – –		
	Works, &c. - - - - - - - -		3,200 – –		
	Salary of Clerk of Works - - - - -		60 18 –		
	Paid Receiver of the Duchy of Cornwall on account of Preliminary Expenses - - -		200 – –		
				7,760 18 –	9,423 2 –
Geological Survey, &c.	Commissioners of Works, &c., Vote. Class 4.—Vote 14. 1852–53.	Museum of Practical and Economic Geology, Jermyn-street:	£. s. d.		
		Works and Furniture -	1,278 – 3		
		Rates, Taxes, &c. - -	99 14 –		
		Museum of Irish Industry, Dublin:			
		Works, &c. - - -	1,047 2 –		
		Law Costs, 1849 to 1852 -	39 9 2		
		Geological Survey:			
		Purchase of Books - -	40 3 6		
		Cost of Geological Sections of Railway Cuttings -	150 – –		
				2,654 8 11	1,554 14 3
	Board of Trade. Class 4.—Part Vote 3. 1853–54.	Museum of Practical Geology, Jermyn-street, and College of Chemistry, Oxford-street:			
		Works, &c. - - -	955 2 6		
		Rent, Rates, &c. - -	196 19 –		
				1,152 1 6	499 3 6
		Carried forward - - - £.		688,005 13 5	309,848 9 8

Dr. ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—VOTES OF PARLIAMENT—MISCELLANEOUS ESTIMATES—*continu*

HEADS OF SERVICE.			£. s. d.	Receipts in 1854–55. £. s.
		Brought forward - - -		996,295 16
Ordnance Office, Pall Mall, (Additions, &c.) Class 1.—Vote 2. 1850–51.	Balance, 1st April 1854 - - - - - - - - -		2,014 13 8	
	Amount received from the Occupiers of No. 82, Pall Mall, for part Cost of Party-wall - - - - - - - -		179 17 –	
				2,194 10
Isle of Man Buildings. Class 1.—Vote 6. 1850–51.	Balance, 1st April 1854 - - - - - - - - - - -			2,574 2
British Ambassador's House, Madrid. Class 7.—Vote 6. 1852–53.	Balance, 1st April 1854 - - - - - - - - - - -			1 –
Nelson Monument. Class 4.—Vote 16. 1849–50.	Balance, 1st April 1854 - - - - - - - - - - -			942 –
Harbours of Refuge.	Holyhead Harbour of Refuge.	Balance, 1st April 1854 - - - - - - -		665 13 7
	Portland Harbour of Refuge.	Balance, 1st April 1854 - - - - - - -		228 – 10
New Houses of Parliament. Ventilation. Award to Dr. Reid. Class 7.—Vote 12. 1853–54.	Balance, 1st April 1854 - - - - - - - - - - -			1 1 10
		£.		1,002,902 6 9

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE.—VOTES OF PARLIAMENT—MISCELLANEOUS ESTIMATES—*continued.* *Cr.*

HEADS OF SERVICE.			Expenditure in 1854–55.	Balances on 31st March 1855.
			£. s. d.	£. s. d.
	Brought forward - - -		688,005 13 5	309,848 9 8
Ordnance Office, Pall Mall, (Additions, &c.) Class 1.—Vote 2. 1850–51.	Works, &c. - - - - - - - - -	£. s. d. 278 9 10		
	Architect's Commission (Balance of account) -	435 3 3		
			713 13 1	1,480 17 7
Isle of Man Buildings. Class 1.—Vote 6. 1850–51.	Balance, 31st March 1855 - - - - - - - -		- - -	2,574 2 9
British Ambassador's House, Madrid. Class 7.—Vote 6. 1852–53.	Balance, 31st March 1855 - - - - - - - -		- - -	1 - 4
Nelson Monument. Class 4.—Vote 16. 1849–50.	Balance of Contract for fixing the Bas Relief of the Battle of St. Vincent - - - - -	£. s. d. 400 - -		
	Expenses of supplying and fixing Scaffolding -	12 18 10		
			412 18 10	529 1 10
Harbours of Refuge.	Holyhead Harbour of Refuge. Balance, 31st March 1855 - - - -		- - -	665 13 7
	Portland Harbour of Refuge. Balance, 31st March 1855 - - - -		- - -	228 - 10
New Houses of Parliament. Ventilation. Award to Dr. Reid. Class 7.—Vote 12. 1853–54.	Paid to the Exchequer - - - - - - - -		1 1 10	
		£.	689,133 7 2	
Balance of Votes unexpended on 31st March 1855 - - - - - -			- - -	315,327 6 7
Deduct,—Balances overdrawn on 31st March 1855; viz.:		£. s. d.		
	Office of Works, &c., Salaries and Expenses -	293 9 10		
	Chelsea Bridge - - - - - -	286 17 2		
	Burlington House - - - - - -	978 - -	- - -	1,558 7 -
	Net Balance, as per details [*vide* page 16] - - -	£.	313,768 19 7	
			1,002,902 6 9	

BALANCES, VOTES OF PARLIAMENT, 31st March 1855.

SERVICES.	Securities, Exchequer Bills.	Exchequer.	Paymaster-General, Cash Balances, less Outstanding Orders.	Sub-Accountants.		Net Total.
				Drs.	*Crs.*	
	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
Royal Palaces and Public Buildings -	- - -	48,779 17 -	10,421 11 8	1,405 13 11	398 9 3	60,208 13 4
Buckingham Palace, South Wing -	9,200 - -	5,937 - -	814 9 4	- - -	- - -	6,751 9 4
Royal Parks and Pleasure Gardens -	- - -	24,521 - -	806 12 11	680 18 4	1,847 3 7	23,961 7 8
New Houses of Parliament - -	- - -	33,594 - -	3,503 - 6	5 17 3	- - -	37,102 17 9
Stationery Office - - - - -	- - -	7,500 - -	746 11 -	- - -	- - -	8,246 11 -
General Repository for Public Records	- - -	10,000 - -	6,532 6 10	- - -	- - -	16,532 6 10
Holyhead Harbour, &c. - - -	- - -	8,795 2 9	197 4 10	1,642 12 10	262 13 6	10,372 6 11
Office of Works, &c., Salaries and Expenses - - - - - - - -	- - -	- - -	87 7 5 overdrawn	20 - 2	226 2 7	293 9 10 overdrawn.
British Museum Buildings - -	- - -	69,842 - -	3,159 18 8	- - -	- - -	73,001 18 8
Battersea Park - - - - -	- - -	5,500 - -	2,189 5 10 overdrawn	372 14 10	- - -	3,683 9 -
Chelsea Bridge - - - - -	36,200 - -	- - -	286 17 2 overdrawn	- - -	- - -	286 17 2 overdrawn.
Chelsea Embankment and Public Roadway - - - - - - -	4,300 - -	59,000 - -	15,707 10 10 overdrawn	- - -	- - -	43,292 9 2
British Ambassador's House, Paris -	- - -	1,893 - -	372 2 7	348 3 8	- - -	2,613 6 3
Burlington House, Piccadilly - -	- - -	- - -	* 222 - -	- - -	1,200 - -	978 - - overdrawn.
British Ambassador's House, Constantinople - - - - - - -	- - -	- - -	82 9 -	264 - 5	5 7 -	341 2 5
British Consulate, Constantinople -	- - -	5,000 - -	553 15 3	56 3 9	116 17 5	5,493 6 7
Embassy Chapel, Constantinople -	- - -	2,055 - -	- - -	- - -	- - -	2,055 - -
British Protestant Cemetery, Madrid	- - -	250 - -	60 18 2 overdrawn	1,060 18 2	- - -	1,250 - -
Westminster Abbey (Royal Monuments) - - - - - - -	- - -	2,500 - -	- - -	- - -	- - -	2,500 - -
Statue of King Charles I., Charing Cross	- - -	960 - -	- - -	- - -	- - -	960 - -
Duchy of Cornwall New Office -	- - -	8,569 1 -	859 1 -	- - -	- - -	9,428 2 -
Geological Survey, &c. (Commissioners of Works' Vote) - - - - -	- - -	- - -	921 2 10	633 11 5	- - -	1,554 14 3
Ditto - - (Board of Trade Vote)	- - -	- - -	* 499 8 6	- - -	- - -	499 8 6
Ordnance Office, Pall Mall, Additions, &c. - - - - - - -	- - -	- - -	1,480 17 7	- - -	- - -	1,480 17 7
Isle of Man Buildings - - -	- - -	- - -	2,574 2 9	- - -	- - -	2,574 2 9
British Ambassador's House, Madrid -	- - -	- - -	1 - 4	- - -	- - -	1 - 4
Nelson Monument - - - - -	- - -	- - -	529 1 10	- - -	- - -	529 1 10
Harbours of Refuge:						
Holyhead - - - - - -	- - -	- - -	665 4 7	- 9 -	- - -	665 13 7
Portland - - - - - -	- - -	- - -	228 - 10	- - -	- - -	228 - 10
			35,170 2 10			315,327 6 7
Deduct,—Balances overdrawn -	- - -	- - -	18,331 19 5	- - -	- - -	1,558 7 -
£.	49,700 - -	294,496 - 9	16,838 3 5	6,491 8 9	4,056 13 4	313,768 19 7

* Included by Paymaster-General in Cash Balance for "Miscellaneous Accounts."

SPECIAL ACCOUNTS.

Dr. ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—*continued.*

SPECIAL ACCOUNTS.

METROPOLIS IMPROVEMENTS, GENERAL ACCOUNT.

(Acts 3 & 4 Vict. c. 87; 4 Vict. c. 12; 4 & 5 Vict. c. 40; and 7 Vict. c. 1.)

	£.	s.	d.
To Balance, 1st April 1854	5,413	7	2
To Amount advanced in 1854–55 from the Consolidated Fund, per Act 16 Vict. c. 18, to pay off remaining Liabilities in respect of Loans raised for the purposes of these Improvements	207,328	13	10
To Receipts in 1854–55 from the London Bridge Approaches Fund.—[*See* page 26]	144,900	13	8

	LINES OF IMPROVEMENTS.												
	Oxford-street to Holborn.			Long Acre to Charlotte-street.			London Docks to Spitalfields Church.			Coventry-street to Long Acre.			East Smithfield to Rosemary-lane.		
To Rents received in the Year 1854–55; viz.:	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
Arrears, 1st April 1854	3,758	–	8	82	–	–	–	–	–	171	5	–	7	10	
Rental for the Year 1854–55	4,860	3	6	202	–	–	72	–	–	1,629	15	–	96	8	–
TOTAL Sum receivable - £.	8,618	4	2	284	–	–	72	–	–	1,801	–	–	103	18	–
Deduct, Arrears, 31st March 1855	2,558	9	7	12	–	–	5	–	–	145	10	–	22	10	–
Rents received in 1854–55, £.	6,059	14	7	272	–	–	67	–	–	1,655	10	–	81	8	–
	£. 8,135	12	7												

	£.	s.	d.
	8,135	12	7
To Purchase-money of Site on the New Line from the London Docks to Spitalfields Church	2,900	–	–
To Purchase-money of Site on the New Line from East Smithfield to Rosemary Lane	250	–	–
To Amount taxed off Law Costs, Year 1851	78	3	6
£.	369,006	10	9

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—*continued.* *Cr.*

SPECIAL ACCOUNTS.

METROPOLIS IMPROVEMENTS, GENERAL ACCOUNT.

(Acts 3 & 4 Vict. c. 87; 4 Vict. c. 12; 4 & 5 Vict. c. 40; and 7 Vict. c. 1.)

	£.	s.	d.
By Loan from the Equitable Assurance Society, secured upon the Land Revenues of the Crown, paid off in 1854–55, under the provisions of the Act 16 Vict. c. 18	200,000	–	–
By Interest on the above Loan, paid in 1854–55	7,000	–	–
By Repayments to the Consolidated Fund, in reduction of Advances, per Act 16 Vict. c. 18	158,356	3	6

LINES OF IMPROVEMENTS.

	Oxford-street to Holborn.			Long Acre to Charlotte-street.			London Docks to Spitalfields Church.			Coventry-street to Long Acre.			East Smithfield to Rosemary-lane.					
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
By Property Tax allowed to Tenants	217	2	6	11	2	10	2	18	7	69	4	8	3	8	9	303	17	4
By Receipt Stamps for Rents	–	8	–	–	–	8	–	–	4	–	2	3	–	–	5	–	11	8
By Receiver's Commission	239	12	4	6	13	–	2	11	11	53	18	2	2	14	–	305	9	5
By Law Costs	–	–	–	108	1	2	–	–	–	–	–	–	–	–		108	1	2
By Rates and Taxes	–	–	–	–	–	–	256	2	7	–	–	–	–	–		256	2	7
By Expense of clearing Ground, &c.	–	–	–	–	10	–	20	–	–	–	–	–	–	–		20	10	–
£.	457	2	10	126	7	8	281	13	5	123	5	1	6	3	2			
							£. 994	12	2									

	£.	s.	d.
By Law Charges in connection with the Repayment of Loan from the Equitable Assurance Society	16	8	
By Fees for the Inrolment of Documents in the Land Revenue Record Office	10	18	–
By Architect's Commission (on account)	500	–	–
By Balance on the 31st March 1855; viz.—			
In the hands of the Paymaster-General	2,128	9	1
£.	369,006	10	9

Dr. ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.*

METROPOLIS IMPROVEMENTS, SPITALFIELDS to SHOREDITCH.

(Act 9 & 10 Vict. c. 34.)

	£.	s.	d.	£.	s.	d.
To Balance, 1st April 1854						30,870 19 7
To Produce of 1 *d.*, Coal Duty						16,351 15 4
To Rents received in 1854–55						59 9 –
viz. Arrears, 1st April 1854				12	11 3	
Rental for the Year 1854–55				74	9 –	
TOTAL Sum receivable				87	– 3	
Deduct,						
Rent discharged in 1854–55	15	–	–			
Arrears on 31st March 1855	12	11	3			
				27	11 3	
Rents received in 1854–55				59	9 –	
To Amount of sundry small Rents arising from Property purchased for the purposes of the Improvements						530 12 9
To Proceeds of Sale of Building Materials						142 14 11
			£.			47,955 11 7

SOUTHWARK IMPROVEMENTS.

	EXCHEQUER BILLS.			CASH.		
	£.	s.	d.	£.	s.	d.
To Balance, 1st April 1854	79,600	–	–	1,340	1	–
To Exchequer Bills purchased, as per contra	3,700	–	–	—		
To Interest of Exchequer Bills	–	–	–	2,393	18	–
£.	83,300	–	–	3,733	19	–

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.* *Cr.*

METROPOLIS IMPROVEMENTS, SPITALFIELDS to SHOREDITCH.

(Act 9 & 10 Vict. c. 34.)

	£. s. d.
By Principal of Loans paid off in 1854–55	16,705 8 9
By Interest on Loans paid in 1854–55	3,710 16 –
By Purchases of Property, 13,081 *l.* 3 *s.*; Compensation to outgoing Tenants, 60 *l.*	13,141 3 –
By Rent of Property purchased, and Interest of Purchase-money	433 14 11
By Cost of Investment of Purchase-money	133 11 4
By Law Costs and Charges connected with the Purchase of Property	690 18 2
By Rates and Taxes	418 3 5
By Expense of constructing Vaults, making Drains, clearing Ground, putting up Hoarding, &c.	1,253 – 8
By Clerk of Works' Salary and Disbursements	116 14 11
By Property Tax allowed to Tenants, 8 *l.* 17 *s.* 10 *d.*; Receipt Stamps, 11 *d.*	8 18 9
By Receiver's Commission	19 4 –

	£. s. d.	£. s. d.
By Balance on the 31st March 1855; viz.:		
In the hands of the Paymaster-General	11,314 17 5	
Ditto of J. Pennethorne, Architect	58 16 –	
	11,373 13 5	
Less,—Amount due to Commissioners of Inland Revenue, for Income Tax not paid over	49 15 9	
		11,323 17 8
	£.	47,955 11 7

SOUTHWARK IMPROVEMENTS.

	EXCHEQUER BILLS.	CASH.
	£. s. d.	£. s. d.
By Amount invested in the Purchase of 3,700 *l.* Exchequer Bills, as per contra		3,719 18 11
By Balance on the 31st March 1855; viz.:		
Exchequer Bills	83,300 – –	—
In the hands of the Paymaster-General		14 – 1
£.	83,300 – –	3,733 19 –

Dr. ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.*

PIMLICO IMPROVEMENTS.

	£.	s.	d.
To Balance, 1st April 1854	9,812	15	1
To Amount received from Sales of Property	10,778	–	–
To Rents received in 1854–55	979	5	1
viz. Arrears, 1st April 1854 — £. 299 9 7			
Rental for 1854–55 — £. 1,144 15 5			
Total Sum receivable — £. 1,444 5 –			
Deduct,			
Rents of Properties sold in 1854–55 — £. 216 15 10			
Rents remitted in 1854–55 — £. 143 – –			
Arrears, 31st March 1855 — £. 105 4 1			
£. 464 19 11			
Rents received in 1854–55 — £. 979 5 1			
To Interest received on Purchase-money	50	4	–
To Proceeds of Sale of Building Materials	207	6	10
£.	21,827	11	–

WESTMINSTER IMPROVEMENTS.

(Act 13 & 14 Vict. c. 103.)

	£.	s.	d.
To Balance, 1st April 1854	2,082	–	–
£.	2,082	–	–

WINDSOR TOWN IMPROVEMENTS.

	£.	s.	d.
To Balance, per contra, transferred to "Palaces and Public Buildings" (page 5), Provision having been made for the Amount in the Vote for that Service	393	16	8

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.* *Cr.*

PIMLICO IMPROVEMENTS.

	£. s. d.
By Compensation to Tenants for surrender of Premises	179 5 –
By Law Charges, and Charges of Surveyors employed in the Valuation of Properties in the proposed Line of Improvements	353 10 2
By Charges of Auctioneer upon Sales of Property	542 19 –
By Payments to Contractor, on account of Contract for the Removal and Rebuilding of the Lodge at Buckingham Gate	1,250 – –
By Expense of altering Carriage-way and Footpaths consequent on the Removal of the above Lodge	110 – 1
By Alteration of Line of Street, south of Buckingham Palace, and re-forming Carriage and Foot-ways	918 17 9
By clearing Ground, putting up Hoarding, &c.	97 12 1
By Rents, Rates and Taxes	138 8 8
By Property Tax allowed to Tenants, 41 *l.* 17 *s.* 5 *d.*; Receipt Stamps, 5 *s.* 11 *d.*	42 3 4
By Receiver's Commission	33 13 7
By Balance on the 31st March 1855; viz.:	
In the hands of the Paymaster-General	17,861 1 4
£.	21,827 11 –

WESTMINSTER IMPROVEMENTS.

(Act 13 & 14 Vict. c. 103.)

	£. s. d.	£. s. d.
By Law Charges, Year 1850–51		283 11 6
By Balance on 31st March 1855; viz.:		
In the hands of the Paymaster-General	1,798 1 6	
Due by "Westminster Bridge" Account	– 7 –	
		1,798 8 6
£.		2,082 – –

WINDSOR TOWN IMPROVEMENTS.

	£. s. d.
By Balance on the 1st April 1854	393 16 8

Dr. ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.*

LIABILITIES ON ACCOUNT OF MONEYS - - - - -

	£.	s.	d.	RECEIPTS in 1854–55. £.	s.	d.
METROPOLIS IMPROVEMENTS, GENERAL ACCOUNT:						
To Balance on 1st April 1854 - - - - - - - - -	872,947	13	1			
To Amount advanced from the Consolidated Fund, per Act 16 Vict. c. 18, to pay off existing Liabilities - - - - - - - - -	207,328	13	10			
				1,080,276	6	11
METROPOLIS IMPROVEMENTS, SPITALFIELDS TO SHOREDITCH:						
To Balance on 1st April 1854 - - - - - - - - - - -				83,679	18	–
SOUTHWARK IMPROVEMENTS:						
To Balance on 1st April 1854 - - - - - - - - - - -				80,135	16	2
WESTMINSTER IMPROVEMENTS:						
To Balance on 1st April 1854 - - - - - - - - - - -				30,000	–	–
CHELSEA BRIDGE:						
To Balance on 1st April 1854 - - - - - - - - - - -				60,000	–	–
CHELSEA EMBANKMENT:						
To Balance on 1st April 1854 - - - - - - - - - - -				20,000	–	–
BATTERSEA PARK:						
To Balance on 1st April 1854 - - - - - - - - - - -				200,000	–	–
			£.	1,554,092	1	1

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.* *Cr.*

BORROWED FOR METROPOLITAN IMPROVEMENTS.

	£. s. d.	LIABILITIES discharged in 1854-55. £. s. d.	BALANCES on 31st March 1855. £. s. d.
METROPOLIS IMPROVEMENTS, GENERAL ACCOUNT:			
By Amount paid in discharge of Principal of Loans raised on the Security of the Land Revenues of the Crown	200,000 – –		
By Repayment to the Exchequer in Reduction of Advances, per Act 16 Vict. c. 18	158,356 3 6		
		358,356 3 6	
By Balance due to Her Majesty's Exchequer		– – –	721,920 3 5
METROPOLIS IMPROVEMENTS, SPITALFIELDS TO SHOREDITCH:			
By Amount paid to the Bank of England in part Liquidation of Loans		16,705 8 9	
By Balance due to the Bank of England		– – –	66,974 9 3
SOUTHWARK IMPROVEMENTS:			
By Balance due to Her Majesty's Exchequer		– – –	80,135 16 2
WESTMINSTER IMPROVEMENTS:			
By Balance due to the Bank of England		– – –	30,000 – –
CHELSEA BRIDGE:			
By Balance due to the Public Works Loan Commissioners		– – –	60,000 – –
CHELSEA EMBANKMENT:			
By Balance due to the Public Works Loan Commissioners		– – –	20,000 – –
BATTERSEA PARK:			
By Balance due to the Public Works Loan Commissioners		– – –	200,000 – –
		375,061 12 3	
Total outstanding Liability on 31st March 1855		1,179,030 8 10	
	£.	1,554,092 1 1	

Dr. ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.*

LONDON BRIDGE APPROACHES FUND LIABILITY ACCOUNT.

STATEMENT of the SUMS payable to the COMMISSIONERS of Her Majesty's WORKS and PUBLIC BUILDINGS out COMMISSIONERS of Her Majesty's WOODS, &c., as indemnity for the Sums raised by way of Loan for the purpo Consolidated Fund, per Act 16 Vict. c. 18; made up to the 5th April 1855.

CHARGES.		Rate of Interest.	BALANCES 5th January 1854.		Interest accrued to the 5th April 1855.	TOTAL:	
Acts.	Amount.		Principal.	Interest.		Principal.	Interest.
	£. s. d.	£.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s.
2 & 3 Vict. c. 80 -	200,000 – –	5					
3 & 4 Vict. c. 87 -	100,000 – –	5	489,000 – –	106,841 16 9	30,486 4 1	489,000 – –	137,328 –
4 & 5 Vict. c. 12 - 5 & 6 Vict. c. 64 -	189,000 – –	5					
13 & 14 Vict. c. 103	176,000 – –	4	176,000 – –	- nil -	8,800 – –	176,000 – –	8,800 –
£.	665,000 – –	- -	665,000 – –	106,841 16 9	39,286 4 1	665,000 – –	146,128 –

LONDON BRIDGE APPROACHES FUND (Repayments from) CASH ACCOUNT.

(Act 16 Vict. c. 18.)

	£. s. d.	£. s.
To Balance, 1st April 1854 - - - - - - - - - - - - - - -		12 19
To Amount received in 1854–55 from the Chamberlain of the City of London, being the Surplus of the London Bridge Approaches Fund, for the four Quarters ended 5th January 1855 - -		139,345 15
To Interest received from the Chamberlain of the City of London on a Charge of £. 146,000 for one Year to the 5th January 1855 - - - - - - - -	5,840 – –	
Less Income Tax - - - - - - - - -	298 1 8	
		5,541 18
£.		144,900 13

ADVANCES by the LORDS of the TREASURY for SPECIAL and TEMPORARY PURPOSES.

	£. s.
To Balance, 1st April 1854 - - - - - - - - - - - - - - -	2,155 15
To Advances in 1854–55 - - - - - - - - - - - - - - -	1,850 –
£.	4,005 16

LONDON BRIDGE APPROACHES FUND LIABILITY ACCOUNT.

the growing Produce of the LONDON BRIDGE APPROACHES FUND, under Charges imposed upon that Fund by the of the Metropolitan Improvements upon the Security of the Land Revenues of the Crown, now transferred to the

LIABILITY DISCHARGED.						DATE from which Interest remains due.	BALANCES 5 April 1855.				
	Principal.			Interest.			Principal.			Interest.	
	£.	s.	d.	£.	s.	d.		£.	s.	d.	£. s. d.
Surplus of the London Bridge Approaches Fund, for one year to 5th January 1855, paid to the Commissioners of Works, &c.	6,821	1	5	132,524	14	3	19 Feb. - 1855	193,178	18	7	1,190 16 7
							5 Jan. - 1855	100,000	–	–	1,250 – –
							5 Jan. - 1855	189,000	–	–	2,362 10 –
Interest on 146,000 *l.*, one year to 5th January 1855, paid to the Commissioners of Works, &c.	-	-	-	5,840	–	–	5 Jan. - 1855	146,000	–	–	1,460 – –
Interest on 30,000 *l.*, one year to 5th January 1855, paid to the Bank of England	-	-	-	1,200	–	–	5 Jan. - 1855	30,000	–	–	300 – –
£.	6,821	1	5	139,564	14	3	£.	658,178	18	7	6,563 6 7

LONDON BRIDGE APPROACHES FUND (Repayments from) CASH ACCOUNT.

(Act 16 Vict. c. 18.)

	£.	s.	d.
By Amount transferred to the Metropolis Improvements General Account (page 18), and applied in reduction of the Advances from the Consolidated Fund, per Act 16 Vict. c. 18 - - -	144,900	13	8
£.	144,900	13	8

ADVANCES by the LORDS of the TREASURY for SPECIAL and TEMPORARY PURPOSES.

	£.	s.	d.	£.	s.	d.
By Amounts repaid to the Lords of the Treasury in 1854–55 - - - - - - - -				532	3	–
By Payment of Law Costs in connexion with the intended New Street from Carey Street to Fetter Lane, and the Thames Embankment Bills - - - - - - - - - -				604	10	11
By Payment to Dr. Lyon Playfair, for Examination and Report upon Sewage Manure - -				10	10	–
By Payments for Professional Services in respect of the Metropolis Water Supply Bill and the proposed Park at Islington - - - - - - - - - - - - - -				158	12	3
By Balance on 31st March 1855; viz.:						
Amount due by Vote for "Royal Parks," &c. - - - - - -	1,500	–	–			
Ditto - by Vote for "Burlington House" - - - - - -	1,200	–	–			
				2,700	–	–
£.				4,005	16	2

Dr. ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.*

HOLYHEAD ROADS, &c.—LOAN ACCOUNTS.

1st. CONSOLIDATED FUND LOANS.

DATE of LOANS.	TRUSTS.	Amount of Original Loan on which Balances are due.	Rate of Interest per Cent.	Balances Due 1st April 1854. Principal.	Balances Due 1st April 1854. Interest.	Interest accrued in the Year 1854-55.	TOTAL
		£.		£. s. d.	£. s. d.	£. s. d.	£. s.
1 Apr. 1826	St. Alban's and South Mims	4,000	3	604 4 2	11 10 5	15 6 –	631 –
23 Feb. 1827	Ditto	14,000	4	14,000 – –	13,271 18 10	560 – –	27,831 18
23 Feb. 1827 and 12 Feb. 1830	Stratford and Dunchurch	5,000	4	854 2 9	8 14 1	31 13 5	894 10
9 May 1829 and 26 Apr. 1831	Highgate Archway Company	13,000	4	13,000 – –	9,272 16 6	520 – –	22,792 16
9 May 1829	Hockliffe and Stratford	4,700	4	3,150 12 6	1,004 13 8	126 – 6	4,281 6
11 Aug. 1829	Shiffnal District	5,500	4	5,500 – –	1,921 1 7	220 – –	7,641 1
	£.	46,200	– –	37,108 19 5	25,490 15 1	1,472 19 11	—
						£.	64,072 14

2d. EXCHEQUER BILL LOANS.

25 Apr. 1837 to 12 Dec. 1840	Dunstable	5,000	4	4,436 7 –	710 14 5	177 9 1	5,324 10
	Puddle Hill	9,100	4	7,729 – 3	980 4 11	309 3 2	9,018 8
	Hockliffe and Stratford	10,000	4	10,000 – –	5,842 13 1	400 – –	16,242 13
	Stratford and Dunchurch	19,500	4	16,760 7 8	3,577 2 10	670 8 4	21,007 18
	Dunchurch and Stonebridge	6,650	4	3,850 4 –	102 10 7	143 10 5	4,096 5
	Shrewsbury and Holyhead	3,850	4	1,503 16 –	19 2 4	57 1 8	1,580 –
	£.	54,100	– –	44,279 14 11	11,232 8 2	1,757 12 8	—
						£.	57,269 15

CASH ACCOUNT OF THE ABOVE.

			£. s. d.	£. s. d.
To Balance on 1st April 1854				861 10
To Receipts in the year 1854-55, as shown in the above Accounts; viz.:—				
Consolidated Fund Loans	Principal		399 18 3	
	Interest		139 14 4	539 12
Exchequer Bill Loans	Principal		503 14 11	
	Interest		531 19 –	1,035 13 11
			£.	2,436 16

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.* *Cr.*

HOLYHEAD ROADS, &c.—LOAN ACCOUNTS.

1st. CONSOLIDATED FUND LOANS.

ACTS.	TRUSTS.	Date from which Interest remains Due.	Sums received from the Trustees in 1854–55.		Balances due 31st March 1855.	
			Principal.	Interest.	Principal.	Interest.
			£. s. d.	£. s. d.	£. s. d.	£. s. d.
6 Geo. 4, c. 100	St. Alban's and South Mims	1 Feb. 1855	157 14 6	24 13 1	446 9 8	2 3 4
7 Geo. 4, c. 76	ditto	9 Sept. 1830	- -	80 10 5	14,000 - -	13,751 8 5
Ditto	Stratford and Dunchurch	3 Jan. 1855	242 3 9	34 10 10	611 19 -	5 16 8
9 Geo. 4, c. 75	Highgate Archway Company	2 June 1836	- -	- -	13,000 - -	9,792 16 6
Ditto	Hockliffe and Stratford	12 Apr. 1846	- -	- -	3,150 12 6	1,130 14 2
Ditto	Shiffnal District	7 July 1845	- -	- -	5,500 - -	2,141 1 7
		£.	399 18 3	139 14 4	36,709 1 2	26,824 - 8

£. 64,072. 14. 5.

2d. EXCHEQUER BILL LOANS.

6 & 7 Will. 4, c. 35 and 3 & 4 Vict. c. 104	Dunstable	11 Nov. 1850	- -	111 6 9	4,436 7 -	776 16 9
	Puddle Hill	29 Jan. 1851	- -	- -	7,729 - 3	1,289 8 1
	Hockliffe and Stratford	24 Aug. 1849	- -	- -	10,000 - -	6,242 13 1
6 & 7 Will. 4, c. 35	Stratford and Dunchurch	25 Mar. 1839	- -	217 9 4	16,760 7 8	4,030 1 10
	Dunchurch and Stonebridge	17 July 1854	371 - 9	147 13 7	3,479 3 3	98 7 5
	Shrewsbury and Holyhead	14 Nov. 1854	132 14 2	55 9 4	1,371 1 10	20 14 8
		£.	503 14 11	531 19 -	43,776 - -	12,458 1 10

£. 57,269. 15. 9.

CASH ACCOUNT OF THE ABOVE.

	£. s. d.
By Payments in the Year 1854–55 to the Consolidated Fund	983 13 6
By - - ditto - - - - - to the Public Works Loan Commissioners	1,453 3 3
£.	2,436 16 9

Dr. ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.*

WESTMINSTER NEW BRIDGE.

(Act 16 & 17 Vict. c. 46.)

	£.	s.	d.	Stock, 3 per Cent. Consols. £.	s.	d.	Cash. £.	s.	d.
To Balance, 1st April 1854				35,529	7	5	5,186	9	8
To Produce of 15,000 *l.* Stock sold as per contra				–	–	–	13,811	–	–
To Interest on Stock				–	–	–	918	19	–
To Rents received in 1854–55 from the Westminster Bridge Estates				–	–	–	8,122	5	6
viz. Arrears of Rents 1st April 1854	547	12	–						
Rental for 1854–55	7,649	13	6						
TOTAL Sum receivable	£. 8,197	5	6						
Deduct,—Arrears 31st March 1855	75	–	–						
Rents received in 1845–55	£. 8,122	5	6						
To Amount received for Cost of preparation of Plans, &c.				–	–	–	6	12	–
		£.		35,529	7	5	28,045	6	2

BROMPTON CEMETERY.

(Act 15 & 16 Vict. c. 85.)

	£.	s.	d.
To Balance, 1st April 1854	4,915	19	2
To Receipts by Manager of the Cemetery for Burials	8,312	7	7
To Amount received from Earl Kilmorey, for Plot of Ground in the Cemetery, sold to him	1,030	16	9
To other Receipts, Sale of Grass Crops, &c.	72	5	–
£.	14,331	8	6

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.* *Cr.*

WESTMINSTER NEW BRIDGE.
(Act 16 & 17 Vict. c. 46.)

	£. s. d.	£. s. d.	Stock, 3 per Cent. Consols. £. s. d.	Cash. £. s. d.
By Payments to Mr. C. J. Mare, on account of his Contract for the Construction of the New Bridge			- - -	19,659 12 4
By Repairs to Carriage and Footways of present Bridge			- - -	740 4 7
By Law Costs and other Charges connected with the Passing of the Bill for the New Bridge, and the Transfer of the Westminster Bridge Estate			- - -	360 17 11
By Alterations and Additions to the Engineer's Office			- - -	292 1 6
By Amount paid to Thomas Page, Esq., Engineer, on account of Professional Services			- - -	2,058 16 10
By Salary and Disbursements of Resident Engineer			- - -	276 19 9
By Retiring Allowance of the Secretary and Treasurer to the late Bridge Commissioners, one Year, to 5th January 1855			- - -	266 - -
By Miscellaneous Payments for Boat-hire, preparation of Plans, &c.			- - -	34 3 -
By Payments by Receiver; viz.:				
Property Tax allowed to Tenants, and Receipt Stamps	394 14 6			
Salaries, Wages and Allowances	253 19 3			
Attendance of Police, and Supply of Gas for Bridge	253 11 -			
Rates, Taxes, &c.	91 19 10			
			- - -	994 4 7
By Cash Account,—Stock sold for 13,811*l.* debited per contra			15,000 - -	
By Balance on the 31st March 1855; viz.:				
Stock			20,529 7 5	
In the hands of the Paymaster-General	3,373 9 2			
Less,—Amount due to Commissioners of Inland Revenue for Income Tax, not paid over	£. s. d. 10 10 -			
Amount due to Receiver	- 6 6			
Ditto, to Westminster Improvements Account	- 7 -			
	11 3 6			
			- - -	3,362 5 8
		£.	35,529 7 5	28,045 6 2

BROMPTON CEMETERY.
(Act 15 & 16 Vict. c. 85.)

	£. s. d.	£. s. d.	£. s. d.
By Works, &c.			506 5 4
By Purchase of Fittings at the Cemetery Office, No. 12, Haymarket, 40*l.*; Law Costs, 2*l.* 16*s.* 8*d.*			42 16 8
By Payments by Manager of the Cemetery; viz.:			
Salary of Manager		250 - -	
Salary of Chaplain and Assistants		254 4 4	
Salary of Office Clerk, and Clerk at Cemetery		145 - -	
Wages of Grave Diggers, Ground Workmen, &c.		660 1 4	
Payments to Builders, Masons, &c.		768 8 7	
Fees to Incumbents and Clerks of Metropolitan Parishes, &c.		908 19 6	
Rent of Office, 90*l.*; Rates, Taxes, 20*l.* 6*s.*		110 6 -	
Disbursements on account of the Cemetery, for Horse and Cart-hire, Timber, Ropes, Tools, &c.		198 17 8	
Office Expenses, Coals, Cab-hire, Postage, &c.		56 8 11	
			3,352 6 4
By Payment to the Exchequer, pursuant to Act 15 & 16 Vict. c. 85			7,000 - -
By Balance on 31st March; viz.:			
In the hands of the Paymaster-General		2,765 5 11	
Ditto - - of J. H. Ruddick, Manager		697 3 7	
		3,462 9 6	
Less,—Due to Commissioners of Inland Revenue for Income Tax not paid over		32 9 4	
			3,430 - 2
		£.	14,331 8 6

Dr. ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.*

NEW INLAND REVENUE OFFICE, SOMERSET HOUSE.

	£.	s.	d.
To Balance, 1st April 1854	3,300	10	4
To Amount received from the Commissioners of Inland Revenue	36,000	–	–
£.	39,300	10	4

MENAI AND CONWAY BRIDGES (TOLLS ACCOUNT).

(Act 4 & 5 Will. 4, c. 66.)

	£.	s.	d.	£.	s.	d.
To Balance on 1st April 1854				2,290	11	4
To Receipts in 1854–55; viz.:						
Menai Bridge:						
Tolls, &c.				1,556	11	8
Conway Bridge:						
Tolls, &c.	489	15	4			
Received from the Chester and Holyhead Railway Company, for the use of the Slopes of the Embankment at Conway Bridge, one year to Michaelmas 1854	260	–	–			
				749	15	4
£				4,596	18	4

GENERAL POST OFFICE, WORKS AND FURNITURE

	£.	s.	d.
To Balance, 1st April 1854.—[*See* per contra.]			
To Amount received from the Postmaster-General	19,848	8	7
To proceeds of Sale of Old Lead, &c.	17	1	6
£.	19,865	10	1

KNELLER HALL TRAINING SCHOOL.

	£.	s.	d.
To Balance, 1st April 1854	231	6	8
To Receipt from Vote for Public Education	391	15	1
To Proceeds of Sale of Old Metal	8	17	2
To Amount of Order drawn in 1853–54, cancelled	5	–	–
£.	636	18	11

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.* *Cr.*

NEW INLAND REVENUE OFFICE, SOMERSET HOUSE.

	£.	s.	d.
By Works	22,300	–	–
By Salary and Disbursements of Clerk of Works	163	7	3
By Balance on 31st March 1855; viz.:			
In the hands of the Paymaster-General	16,837	3	1
£.	39,300	10	4

MENAI AND CONWAY BRIDGES (TOLLS ACCOUNT).

(Act 4 & 5 Will. 4, c. 66.)

	£.	s.	d.	£.	s.	d.
By Payments to the Exchequer; viz.:						
Net Receipts in the Year 1853–54:						
Menai Bridge	1,555	10	6			
Conway Bridge	735	–	10			
				2,290	11	4
By Expenses of Collection, Year 1854–55; viz.:						
Menai Bridge	7	3	6			
Conway Bridge	27	10	7			
				34	14	1
By Balance on the 31st March 1855; viz.:						
In the hands of the Paymaster-General	2,033	2	8			
Add,—Amount due by Vote for Holyhead Harbour, &c.	238	10	3			
				2,271	12	11
£.				4,596	18	4

GENERAL POST OFFICE, WORKS AND FURNITURE.

	£.	s.	d.
By Balance, 1st April 1854	91	6	–
By Works	12,440	15	6
By Furniture	3,332	18	–
By Clerk of Works' Salary and Lodging Allowance	259	13	11
By Miscellaneous Payments	35	12	9
By Balance on 31st March 1855; viz.:			
In the hands of the Paymaster-General	3,705	3	11
£.	19,865	10	1

KNELLER HALL TRAINING SCHOOL.

	£.	s.	d.
By Payments for Works, Fittings, &c.	628	8	3
By Balance on 31st March 1855; viz.:			
In the hands of the Paymaster-General	8	10	8
£.	636	18	11

Dr. ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.*

METROPOLIS BUILDINGS OFFICE.

	£.	s.	d.
To Amount received from the Treasury to pay Salaries of the Registrar and Official Referees	3,750	–	–
To ditto - - - ditto - - - - - in aid of the Fee Fund	1,070	8	6
To ditto - - - ditto - - - - - to pay Law Costs, &c.	264	8	6
£.	5,084	17	–

NEW POST OFFICE, LIVERPOOL.

	£.	s.	d.
To Balance, 1st April 1854	2,109	1	1
To Balance on the 31st March 1855; viz.:			
Due to "Miscellaneous Accounts" Cash	47	2	9
£.	2,156	3	10

NEW POST OFFICE, GLASGOW.

	£.	s.	d.
To Balance on 31st March 1855; viz.:			
Amounts due to "Miscellaneous Accounts" Cash	368	–	6
£.	368	–	6

ROYAL MILITARY ASYLUM AT CHELSEA, IMPROVEMENTS.

	£.	s.	d.
To Balance on 1st April 1854	809	3	9
To Amount realised by Sale (under the direction of the Lords of the Treasury) of Stock belonging to the Army Prize Fund, to be applied to the enlarging, altering and repairing of the Asylum	10,000	–	–
£.	10,809	3	9

ROYAL PORTLAND DISPENSARY FUND.

(Act 13 & 14 Vict. c. 116.)

	Stock, 3 per Cent. Reduced Annuities.			CASH.		
	£.	s.	d.	£.	s.	d.
To Balance on the 1st April 1854, Stock	1,028	5	7	—		
To Interest of 1,028 *l.* 5 *s.* 7 *d.* Stock, one year to 10th October 1854	-	-	-	30	16	10
£.	1,028	5	7	30	16	10

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.* *Cr.*

METROPOLIS BUILDINGS OFFICE.

	£.	s.	d.
By Salaries of Registrar and Official Referees, one year to 31st December 1854	3,000	–	–
By Payments to the Registrar in aid of the Salaries of Clerks and Office Expenses, one year to 31st December 1854	1,070	8	6
By Law Costs, Year 1851	211	18	6
By Payments to Dr. Lyon Playfair and the late Richard Phillips, Esq., for Experiments in Gas Ventilation	52	10	–
By Balance on the 31st March 1855; viz.:			
In the hands of the Paymaster-General	750	–	–
£.	5,084	17	–

NEW POST OFFICE, LIVERPOOL.

	£.	s.	d.
By Works	2,000	–	–
By Clerk of Works' Salary and Disbursements	115	6	1
By Law Costs	40	17	9
By Balance on 31st March 1855.—[*See* per contra].			
£.	2,156	3	10

NEW POST OFFICE, GLASGOW.

	£.	s.	d.
By Works executed in the preparation of Site	39	6	4
By Clerk of Works for Salary, Lodging Allowance and Disbursements	291	4	2
By Payment for preparation of Working Drawings	37	10	–
£.	368	–	6

ROYAL MILITARY ASYLUM AT CHELSEA, IMPROVEMENTS.

	£.	s.	d.
By Payments for preparation of Drawings	19	3	3
By Balance on the 31st March 1855; viz.:			
In the hands of the Paymaster-General	10,790	–	6
£.	10,809	3	9

ROYAL PORTLAND DISPENSARY FUND.

(Act 13 & 14 Vict. c. 116.)

	Stock, 3 per Cent. Reduced Annuities.			CASH.		
	£.	s.	d.	£.	s.	d.
By Amount paid to the Chairman of the Royal Portland Dispensary Fund	–	–	–	30	16	10
By Balance on the 31st March 1855, Stock	1,028	5	7	—		
£.	1,028	5	7	30	16	10

Dr. ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.*

PORTLAND FERRY BRIDGE FUND.
(Act 13 & 14 Vict. c. 116.)

	Stock, 3 per Cent. Consols. £. s. d.	CASH. £. s. d.
To Balance on the 1st April 1854, Stock	4,389 1 8	—
To Interest of 4,389 *l.* 1 *s.* 8 *d.* Stock, one Year, to 5 January 1855	- - -	123 19 10
£.	4,389 1 8	123 19 10

PRELIMINARY INQUIRIES ON APPLICATIONS FOR LOCAL ACTS.

	£. s. d.
To Balance, 1st April 1854	1,324 13 11
£.	1,324 13 11

WORKS AT CLAREMONT.

	£. s. d.
To Balance, 1st April 1854.—[*See* per contra].	
To Amount received from the Trustees of the King of the Belgians	845 10 4
£.	845 10 4

FUNERAL OF FIELD MARSHAL THE DUKE OF WELLINGTON.

	£. s. d.
To Amount received from the Lords of the Treasury	129 4 9
£.	129 4 9

MANLEY COTTAGE, KENNINGTON.

	£. s. d.
To Balance, 1st April 1854.—[*See* per contra].	
To Amount received from the Board of Ordnance, in re-imbursement of Payments to 31st March 1854	216 13 –
To Balance on 31st March 1855; viz.:	
Due to the Vote "Public Buildings" by the Board of Ordnance	59 6 9
£.	275 19 9

COMMISSIONERS OF WOODS, &c.

	£. s. d.	£. s. d.
To Balance, 1st April 1854.—[*See* per contra].		
To Amount received from Commissioners of Woods, &c., on account of Payments of Wages, per contra		123 6 6
To Amount received from Commissioners of Woods, &c., in repayment of Salary and Disbursements of Clerk of Works, as per contra		93 – 8
To Proceeds of Sale of Building Materials of Two Old Cottages at Cumberland Lodge, Windsor Great Park		41 5 3
To Balance on the 31st March 1855; viz.:		
Due to Vote "Public Buildings"	79 16 9	
Due to Vote "Royal Parks, &c."	6 6 –	
		86 2 9
£.		343 15 2

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.* *Cr.*

PORTLAND FERRY BRIDGE FUND.
(Act 13 & 14 Vict. c. 116.)

	Stock, 3 per Cent. Consols. £. s. d.	CASH. £. s. d.
By Amount paid to the Chairman of the Ferry Bridge Committee		123 19 10
By Balance on 31st March 1855, Stock	4,389 1 8	—
£.	4,389 1 8	123 19 10

PRELIMINARY INQUIRIES ON APPLICATIONS FOR LOCAL ACTS.

	£. s. d.
By Law Expenses, Year 1851	3 19 4
By Balance on 31st March 1855; viz.: In the hands of the Paymaster-General	1,320 14 7
£.	1,324 13 11

WORKS AT CLAREMONT.

	£. s. d.
By Balance on 1st April 1854	3 15 —
By Works, &c.	819 10 4
By Balance on the 31st March 1855; viz.: In the hands of the Paymaster-General	22 5 —
£.	845 10 4

FUNERAL OF FIELD MARSHAL THE DUKE OF WELLINGTON.

	£. s. d.
By Expenses of the removal of the Coffin to St. Paul's Cathedral	100 4 9
By Cost of colouring Drawings descriptive of the Funeral	29 — —
£.	129 4 9

MANLEY COTTAGE, KENNINGTON.

	£. s. d.
By Balance, 1st April 1854	216 13 —
By Payments: Rent, 55 *l.*; Rates and Taxes, 3 *l.* 4 *s.* 3 *d.*; Insurance, 1 *l.* 2 *s.* 6 *d.*	59 6 9
By Balance on 31st March 1855.—[*See* per contra].	
£.	275 19 9

COMMISSIONERS OF WOODS, &c.

	£. s. d.
By Balance, 1st April 1854	63 3 6
By Payments of Labourers' Wages in Windsor Great Park	146 5 9
By Salary and Disbursements of Clerk of Works	93 — 8
By Amount paid Commissioners of Woods, &c., proceeds of Sale of Building Materials, as per contra	41 5 3
By Balance on the 31st March 1855—[*See* per contra].	
£.	343 15 2

Dr. ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.*

COMMISSIONERS OF THE GREAT EXHIBITION.

	£.	s.	d.
To Balance on the 1st April 1854	119	10	–
£.	119	10	–

INDIAN LAW COMMISSION.

	£.	s.	d.
To Balance on the 31st March 1855; viz.: Due to Vote for "Public Buildings, &c."	587	7	1
£.	587	7	1

THE GATEKEEPERS, RICHMOND PARK.

	£.	s.	d.
To Amount received from the Scottish Widows' Fund Assurance Society	147	16	–
To Amount received from two Gatekeepers to pay Premium of Insurance on their Lives	10	–	–
£.	157	16	–

MORTGAGE ACCOUNT (SHREWSBURY AND HOLYHEAD ROADS).

		£.	s.	d.
To Balance of Debt outstanding on 1st April 1854	£.	5,851	7	6

FUND FOR THE DISCHARGE OF THE INCUMBRANCES (SHREWSBURY AND HOLYHEAD ROADS).

		£.	s.	d.
To Balance on 31st March 1855; viz.: Due to Vote for "Holyhead Harbour, &c."	£.	66	4	–

SUNK FENCE, KEW GARDENS.

		£.	s.	d.
To Balance on 31st March 1855; viz.: Due to "Public Buildings" Cash	£.	299	1	4

BUCKINGHAM PALACE INCLOSURE.

		£.	s.	d.
To Balance on 31st March 1855; viz.: Due to "Royal Parks" Cash	£.	266	14	1

ABSTRACT ACCOUNTS OF RECEIPT AND EXPENDITURE—SPECIAL ACCOUNTS—*continued.* *Cr.*

COMMISSIONERS OF THE GREAT EXHIBITION.

	£.	s.	d.
By Payments for Horse-hire, Grass Seed, &c.	96	13	8
By Balance on 31st March 1855; viz.: Due by Vote for "Royal Parks, &c."	22	16	4
£.	119	10	–

INDIAN LAW COMMISSION.

	£.	s.	d.
By Vote for "Palaces and Public Buildings" (page 4), transfer of Amount paid in 1853-54, Poor-rates on the Office of the Commission	14	12	6
By Payments in 1854–55; viz.:			
Works and Repairs, Furniture, Fittings, &c.	228	4	9
Rent of Office, Rates, Taxes and Insurance	344	9	10
£.	587	7	1

THE GATEKEEPERS, RICHMOND PARK.

	£.	s.	d.
By Balance, 1st April 1854	147	16	–
By Payments to Scottish Widows' Fund Life Assurance Society	10	–	–
£.	157	16	–

MORTGAGE ACCOUNT (SHREWSBURY AND HOLYHEAD ROADS).

By Balance of Debt outstanding on 31st March 1855 £.	5,851	7	6

FUND FOR THE DISCHARGE OF THE INCUMBRANCES (SHREWSBURY AND HOLYHEAD ROADS).

By Balance on 1st April 1854 £.	66	4	–

SUNK FENCE, KEW GARDENS.

By Balance on 1st April 1854 £.	299	1	4

BUCKINGHAM PALACE INCLOSURE.

By Balance on 1st April 1854 £.	266	14	1

BALANCES—SPECIAL ACCOUNTS, 31st March 1855.

SERVICES.	SECURITIES. £. s. d.
Metropolis Improvements, General Account	- - -
Metropolis Improvements, Spitalfields to Shoreditch	- - -
Southwark Improvements	83,300 – – Exchequer Bills.
Pimlico Improvements	- - -
Westminster Improvements	- - -
Advances by the Lords of the Treasury for Special and Temporary Purposes	- - -
Westminster New Bridge	20,529 7 5 3 per Cent. Consols.
Brompton Cemetery	- - -
New Inland Revenue Office, Somerset House	- - -
Menai and Conway Bridges, Tolls Account	- - -
General Post Office, Works and Furniture	- - -
Kneller Hall Training School	- - -
Metropolis Buildings Office	- - -
New Post Office, Liverpool	- - -
New Post Office, Glasgow	- - -
Royal Military Asylum at Chelsea, Improvements	- - -
Royal Portland Dispensary Fund	1,028 5 7 3 per Cent. Reduced Anns.
Portland Ferry Bridge Fund	4,389 1 8 3 per Cent. Consols.
Preliminary Inquiries on Applications for Local Acts	- - -
Works at Claremont	- - -
Manley Cottage, Kennington	- - -
Commissioners of Woods, &c.	- - -
Commissioners of the Great Exhibition	- - -
Indian Law Commission	- - -
Fund for the Discharge of the Incumbrances, Shrewsbury and Holyhead Roads	- - -
Sunk Fence, Kew Gardens	- - -
Buckingham Palace Inclosure	- - -
Deduct Balances overdrawn	- - -
£.	109,246 14 8

Examined.
(signed) *W. G. Goodliffe*,
Book-keeper.

Office of Works, &c.
30 November 1855.

* Included by Paymaster-general in Cash Balance for "Miscellaneous Accounts."

We, the Commissioners for Auditing the Public Accounts, do hereby certify, that these Accounts have been examined 1856, No. 43, accompanying the Accounts, the foregoing are correct Statements of the Receipt and Expenditure for

Examined.
H. T. D. Bathurst,
Inspector.

BALANCES—SPECIAL ACCOUNTS, 31st March 1855.

Paymaster-General; Cash Balances, less, Outstanding Orders.	SUB-ACCOUNTANTS, &c.		NET GENERAL BALANCE.	
	Drs.	*Crs.*	Available.	Overdrawn.
£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
2,128 9 1	- - - -	- - - -	2,128 9 1	—
11,314 17 5	58 16 —	49 15 9	11,323 17 8	—
14 — 1	- - - -	- - - -	14 — 1	—
17,861 1 4	- - - -	- - - -	17,861 1 4	—
1,798 1 6	— 7 —	- - - -	1,798 8 6	—
- - - -	2,700 — —	- - - -	2,700 — —	—
3,373 9 2	- - - -	11 3 6	3,362 5 8	—
2,765 5 11	697 3 7	32 9 4	3,430 — 2	—
16,837 3 1	- - - -	- - - -	16,837 3 1	—
2,033 2 8	238 10 3	- - - -	2,271 12 11	—
* 3,705 3 11	- - - -	- - - -	3,705 3 11	—
* 8 10 8	- - - -	- - - -	8 10 8	—
* 750 — —	- - - -	- - - -	750 — —	—
* 47 2 9 overdrawn.	- - - -	- - - -	- - - -	47 2 9
* 368 — 6 overdrawn.	- - - -	- - - -	- - - -	368 — 6
10,790 — 6	- - - -	- - - -	10,790 — 6	—
—	—	—	—	—
—	—	—	—	—
* 1,320 14 7	- - - -	- - - -	1,320 14 7	—
* 22 5 —	- - - -	- - - -	22 5 —	—
- - - -	- - - -	59 6 9	- - - -	59 6 9
- - - -	- - - -	86 2 9	- - - -	86 2 9
- - - -	22 16 4	- - - -	22 16 4	—
- - - -	- - - -	587 7 1	- - - -	587 7 1
- - - -	- - - -	66 4 —	- - - -	66 4 —
- - - -	- - - -	299 1 4	- - - -	299 1 4
- - - -	- - - -	266 14 1	- - - -	266 14 1
74,722 4 11				
415 3 3				
74,307 1 8	3,717 13 2	1,458 4 7	78,346 9 6	1,779 19 3

(signed) B. HALL { First Commissioner of Her Majesty's Works and Public Buildings.

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by Officers under our directions, and that, subject to the observations contained in our Report of the 31st January the Services in question. Dated at the Audit Office, Somerset House, this 31st day of January 1856.

EDWARD ROMILLY.
CHARLES ROSS.
W. L. MABERLY.

ROYAL PARKS AND PLEASURE GARDENS.

STATEMENT of Receipts arising from the Profits of Herbage, Sales of Produce, &c., Ground Rents, and Period from the 1st of April 1854 to the 31st of March 1855; together with the Charges thereon, exhibiting the 14 & 15 Vict. c. 42, s. 25.

	£. s. d.	£. s. d.
ST. JAMES'S PARK:		
Rent of Ground	212 13 9	
Grazing Rents	557 6 1	
Sale of old Metal	1 14 2	
Acknowledgment Rents for Encroachments	9 15 1	
		781 9 1
GREEN PARK;		
Contributions for Keys (St. James's Place Passage)		1 1 –
HYDE PARK:		
Rent of Ground	2 – –	
Contribution for Keys	545 19 5	
Sale of old Metal	1 19 –	
Sale of Timber	12 10 5	
Permission to make a Drain	9 19 11	
Acknowledgment Rents for Encroachments	– 2 6	
		572 11 3
KENSINGTON GARDENS:		
Rent of Ground	69 19 10	
Sale of Timber	30 – –	
		99 19 10
CHELSEA HOSPITAL:		
Rent of Ground	19 19 11	
Sale of Timber	1 19 11	
		21 19 10
REGENT'S PARK:		
Rent of Ground	899 1 9	
Contributions for Keys	227 3 1	
Ditto - - Kent Terrace Passage	5 13 6	
Sale of Timber	5 1 11	
Sale of Water Fowl	2 19 11	
Opening Roads	22 3 7	
		1,162 3 9
VICTORIA PARK:		
Rent of Ground	599 19 9	
Sale of Water Fowl	7 17 11	
Sale of Gravel	322 16 7	
		930 14 3
GREENWICH PARK:		
Rent of Ground	58 4 11	
Sale of old Metal	– 2 7	
Sale of Timber	41 11 7	
Sale of old Bricks	9 9 6	
		109 8 7
Carried forward £.		3,679 7 7

ROYAL PARKS AND PLEASURE GARDENS.

CONTRIBUTIONS for the Use of Keys of the Ornamental Gardens in the Royal Parks and Pleasure Gardens, in the Balance of Moneys payable to the Consolidated Fund on the 31st of March 1855, under the Provisions of the Act

	£.	s.	d.
ST. JAMES'S PARK	—		
GREEN PARK	—		
HYDE PARK	—		
KENSINGTON GARDENS:			
Tithe Rent-charge	3	7	9
CHELSEA HOSPITAL	—		
REGENT'S PARK:			
Tithe Rent-charge and Expenses of Apportionment	39	9	—
VICTORIA PARK:			
Tithe Rent-charge	43	2	4
GREENWICH PARK	—		
Carried forward £.	85	19	1

STATEMENT of Receipts arising from Profits of Herbage, Sales of Produce, &c., Ground Rents,

	£.	s.	d.	£.	s.	d.
Brought forward				3,679	7	7
KEW BOTANIC GARDENS:						
Sale of Grass	33	–	–			
Sale of Timber	61	9	4			
Sale of old Metal	1	15	10			
				96	5	2
HAMPTON COURT PARK:						
Rent of Ground	3	19	11			
Wages of Park-keeper received from the Master of the Horse	58	14	8			
Sale of old Metal	229	13	1			
Sale of Timber	91	18	6			
				384	6	2
HAMPTON COURT GARDENS:						
Opening Ground	–	–	–	1	–	–
RICHMOND PARK:						
Grazing Rents	153	12	6			
Sale of Stock	18	13	7			
Freebord Rents	10	3	–			
Sale of Ferns, Leaves, &c.	25	5	–			
Sale of old Metal	3	3	7			
Sale of Timber	742	12	10			
Interest on deferred Payment of Policy of Insurance on Life of Gate-keeper	7	9	–			
				960	19	6
BUSHY PARK:						
Sale of Timber	–	–	–	18	5	5
PARLIAMENT SQUARE GARDENS:						
Contribution for Keys	–	–	–	2	2	–
PHŒNIX PARK:						
Grazing Rents	1,252	3	6			
Fines	–	5	–			
				1,252	8	6
HOLYROOD PARK:						
Rents of Premises	841	2	2			
Interest on Current Account at Royal Bank of Scotland	5	12	–			
				846	14	2
	£.			7,241	8	6

and Contributions for the Use of Keys of the Ornamental Gardens in the Royal Parks, &c.—*continued.*

	£.	s.	d.	£.	s.	d.
Brought forward - - -				85	19	1
KEW BOTANIC GARDENS - - - - - - - - - - - - -				—		
HAMPTON COURT PARK:						
Tithe Rent-charge - - - - - - - - - - - - - -				186	19	1
HAMPTON COURT GARDENS - - - - - - - - - - - -				—		
RICHMOND PARK:						
Tithe Rent-charge - - - - - - - - - - - - - -				43	–	7
BUSHY PARK:						
Allowance to Keeper for Windfall Wood, two Years to 1 October 1854 - - - -				14	–	–
PARLIAMENT SQUARE GARDENS - - - - - - - - - - -				—		
PHŒNIX PARK:						
Rent paid in lieu of right of Grazing, one Year to 1st November 1854 - - - -				80	–	–
HOLYROOD PARK:						
Feu Duty - - - - - - - - - - - - - -	21	18	3			
Land-tax - - - - - - - - - - - - - -	1	14	6			
				23	12	9
				433	11	6
COMMISSION of Receiver - - - - - - - - - - - - - -				113	18	1
BALANCE payable to the Exchequer - - - - - - - - - - - - -				6,693	18	11
			£.	7,241	8	6

AUDITORS' REPORT.

(No. 43.)

My Lords, Audit Office, 31 January 1856.

In pursuance of the 38th section of the 14th & 15th Vict. c. 42, we have the honour to transmit to your Lordships copies of the Abstract Accounts of the Receipt and Expenditure of the Moneys granted or otherwise received and appropriated in the Department under the control or management of the Commissioners of Her Majesty's Works and Public Buildings, in the year ended 31st March 1855, consisting of 28 Accounts of Moneys voted by Parliament, and 36 Accounts of other Services.

With reference to our Report to your Lordships of 31st January 1855 (No. 40/55), laid before Parliament on the 16th February 1855, from which it will be seen that, in the absence of replies to our queries, we have not the means of satisfactorily discharging the duties imposed upon us by Parliament, we have to observe, that none of the queries which have arisen on the present Account have been replied to, although some of them were sent on the 22d of August last. Other queries still remain to be transmitted, which it has not yet been practicable to prepare and forward, in consequence of the Monthly Accounts not being promptly delivered.

On this subject, we have to advert to our Report to your Lordships, dated 5th September 1855, No. 473.

In our Report of the 31st of January 1855 (No. 40), before adverted to, we referred to the non-production of certain Contracts and Accounts of particulars, and we have to notice the absence of these documents with the present Account.

We have received a communication from your Lordships on this subject, dated the 19th of December last, in which your Lordships transmit to us an extract from the Report of the Commissioners, appointed in January 1854 to inquire into the Establishment of the Office of Works.

It appears from this extract that the Commissioners, after adverting to the staff of professional Examiners by whom the Accounts of Artificers and Contractors are revised, express an opinion that the functions of these officers are, in fact, those of Auditors; and that their examination, therefore, to a great extent, supersedes the necessity for a minute investigation of the Accounts at the Audit Office. Your Lordships inform us that the view of the Commissioners of Inquiry, as stated in the extract, had obtained the concurrence of your Lordships' Board: we have no further observations to offer on this subject than those contained in our Report to your Lordships of the 16th of January 1854 (No. 22).

Having thus noticed questions applicable to the Account generally, we have now to advert to some of the items in the Account.

The moneys brought to credit as extra Receipts, not being so supported as to enable us to certify to their correctness, we have called for Rentals properly certified, and for further statements of particulars required for the verification of those sums.

Royal Palaces and Public Buildings.

The Expenditure for Windsor Town Improvements (including an overdrawn Balance of 393 *l.* 16 *s.* 8 *d.* on 31st March 1854), is 4,245 *l.* 0 *s.* 9 *d.*

In the Estimates for 1854–55 (Class 1, Vote 1), provision is made for this Service under two heads:

1. For the discharge of Liabilities under the Act of 11 & 12 Vict. c. 53, 2,664 *l.*
2. For the maintenance of Roads formed under the provisions of the same Act, 2,030 *l.*

The Expenditure in 1854–55 includes, however, 3,559 *l.* 18 *s.* 11 *d.* for the discharge of "Liabilities," exceeding the amount estimated under that head by 895 *l.* 18 *s.* 11 *d.*

Buckingham Palace, South Wing.

A transfer of 3,915 *l.* 2 *s.* 8 *d.* is made to the Vote for Royal Palaces and Public Buildings, stated to be in repayment of Expenditure in 1853–54, chargeable upon the Vote for Buckingham Palace.

It

It is stated, however, in the Vouchers for the payments making up this sum in the Account for 1853–54, that "provision has been made in the Estimates for Palaces and Public Buildings, for the years 1852–53 and 1853–54, for the Works in respect of which this transfer is made," which statement is borne out by the Estimates for those years.

Rents for Public Purposes.

Credit is taken for the following sums, which have not been included in the Estimate for 1854–55, and for the payment of which your Lordships' authority has not been produced:

	£.	s.	d.
8, York-street, Half year to Christmas 1854 - - -	375	–	–
20, Duke-street, Westminster, 10th January to 5th December 1854 - - - - - - - - - - -	602	11	6
Of which sum there has been voted - - - - - -	428	–	–
Leaving an excess of - - - - - - - - - -	174	11	6
Purchase of Fixtures at 8, York-street - - - -	513	17	2
11, Whitehall Place, Half-year to Christmas 1854 - -	300	–	–
Chambers at 16 A, Great George-street, Quarter to Christmas 1854 - - - - - - - - - - -	57	10	–

Supply and Repairs of Furniture.

A charge is made of 485 *l.* 9 *s.* for the purchase of Fixtures at No. 3, St. James'-square, which is not included in the Estimates for 1854–55; neither has your Lordships' authority for the payment been produced: the amount is, however, included in the Grant for 1855–56.

New Houses of Parliament.

Credit is taken for payments, amounting to 450 *l.*, made to Mr. Goldsworthy Gurney, for services in connection with the Ventilation, Warming and Lighting the Houses of Parliament, which do not appear to have been included in the Estimate for the New Houses of Parliament for 1854–55. Your Lordships' authority has been produced for the payment of 250 *l.* only.

The expense of adapting a portion of the Thames Bank Workshops as a Manufactory of Small Arms has been defrayed "out of Funds charged against the amount received for Rents of these Premises." Accordingly the whole of the Rent received has not been paid into Her Majesty's Exchequer; and this Expenditure has not, therefore, been brought under the control of Parliament.

A sum of 729 *l.* is charged as issued to your Lordships on account of Services relating to the Decoration of the Palace of Westminster; but no Account or Vouchers of this Expenditure have been transmitted.

British Museum Buildings.

Credit is taken for 1,630 *l.*, issued to your Lordships in 1851; to which the foregoing observation applies.

Burlington House, Piccadilly.

The grant for this Service has been exceeded by 978 *l.* The cause of the excess appears from the Account to be, that the amount of the Purchase-money only was estimated for, the stamp duty on the Conveyance and Expenses not having been provided for. In respect of this Expenditure, 1,200 *l.* was received from your Lordships as an advance.

Salaries and Expenses of the Office of Works.

The Account under this head shows an excess of Expenditure amounting to 293 *l.* 9 *s.* 10 *d.*: on comparison, however, being made between the Grants of Parliament and the Expenditure, in the years 1852–53, 1853–54 and 1854–55, it is found that the excess on those years is 988 *l.* 3 *s.* 5 *d.*; and the difference between 988 *l.* 3 *s.* 5 *d.* and 293 *l.* 9 *s.* 10 *d.*, viz., 694 *l.* 13 *s.* 7 *d.*, arises from the extra Receipts of the year 1854–55 having been taken into account, and set off against the Expenditure under this head of Service for the three years above adverted to.

We have also to state, that there are several increases of Salary and new Appointments, which are not supported by your Lordships' authority.

ROYAL MILITARY ASYLUM, CHELSEA.

Balance on 1st April 1854, 809 *l.* 3 *s.* 9 *d.*

We beg leave to call your Lordships' attention to the observations respecting the sum of 809 *l.* 3 *s.* 9 *d.*, stated to be a Balance due to the Royal Military Asylum, contained in our Report of the 31st January 1855.

INDIAN LAW COMMISSION.

The Expenditure for this Service, amounting to 587 *l.* 7 *s.* 1 *d.*, is not included in the Estimates laid before Parliament for the year 1854–55, neither has your Lordships' authority been produced to us.

We have, &c.

(signed) EDWARD ROMILLY.
CHARLES ROSS.
W. L. MABERLY.

The Lords Commissioners of Her Majesty's Treasury, &c. &c. &c.

COPY of TREASURY MINUTE, dated 5 February 1856.

(Commissioners of Audit, 31 Jan. 1856.)

TRANSMIT this Report to the First Commissioner of Works, and request he will furnish my Lords with any explanation which he may wish to offer on the several subjects to which it refers, more especially with regard to the alleged delay in answering queries, and in the delivery of the Monthly Accounts.

State, that as the Report must be laid before Parliament, with the Abstract of Accounts to which it refers, my Lords will be glad to receive it again, with the First Commissioner's observations, at an early date.

Office of Works, &c.
12 February 1856.

My Lords,

BY Mr. Wilson's letter of the 7th instant, your Lordships were pleased to transmit to me a Report (returned herewith) from the Commissioners of Audit, dated the 31st ult., relating to the Accounts of Receipt and Expenditure of this department for the year ended the 31st March 1855, and to request me to furnish your Lordships with any explanation which I might wish to offer on the several subjects to which it refers, more especially with regard to the alleged delay in answering queries, and in the delivery of the Monthly Accounts.

Upon this reference, I beg leave to state, that the delay in the Monthly Accounts complained of by the Commissioners of Audit entirely arises from the want of strength in the Account branch of this department, which formed the subject of my Report to your Lordships of the 5th ult.

In that Report I adverted to the arrear of these Accounts, and I recommended the appointment of an addition to the department, for the purpose (amongst others) of clearing away this arrear, and of preventing the recurrence of a similar arrear in future.

By Mr. Wilson's letter of the 10th ult., your Lordships were pleased to approve of that arrangement, and I am now taking measures for carrying it into effect.

With regard to the delay in answering the queries of the Commissioners of Audit, I beg leave to observe, that the queries still undisposed of in this office are not confined to the Account to which their Report has reference, but extend over a period of several years. I find, upon inquiry, that the subject of the earlier arrears was brought by my predecessor, Sir William Molesworth, under the consideration of your Lordships, and that the arrangement which he recommended for disposing of that portion of the arrear is now in operation.

The disposal of many of the queries relating to the Accounts of the Office since Lady-day 1852 has been unavoidably postponed, from the inadequacy of the staff to do more than keep up the current business; but, from arrangements made upon the arrear coming to my knowledge,

knowledge, I have reason to believe that all the outstanding queries since Lady-day 1852, will be put in the way of being immediately disposed of, and that in future, as queries arise, no further delay than is absolutely necessary to obtain the requisite information will occur in replying to them.

I beg leave to add, that it appears to be unnecessary for me to notice in this Report the particular items on which the Commissioners of Audit, in their letter to your Lordships, state that explanation is required with reference to the Account of this Board for the year ended 31st March last, inasmuch as those items form the subject of some of the unanswered queries, to which replies will, as I have before stated, be given with as much despatch as possible.

I am, &c.
(signed) B. HALL.

The Right Honourable
the Lords Commissioners of Her Majesty's Treasury.

WORKS AND PUBLIC BUILDINGS.

1854–5.

ABSTRACT ACCOUNTS of the Receipt and Expenditure of the Moneys Granted or otherwise Received and Appropriated in the Department under the Control or Management of the Commissioners of Her Majesty's Works and Public Buildings, in the Year ended 31st March 1855; together with Report of the Commissioners of Audit; &c.

(*Presented pursuant to Act* 14 *&* 15 *Vict. c.* 42, *s.* 38.)

Ordered, by The House of Commons, *to be Printed,*
22 *February* 1856.

[*Price* 7 *d.*]

59.

Under 8 *oz.*

METROPOLITAN IMPROVEMENTS.

STATEMENT of the ADVANCES out of the CONSOLIDATED FUND to the COMMISSIONERS of HER MAJESTY'S WORKS, &c.; and of the MONEYS paid into the CONSOLIDATED FUND between the 1st January and the 31st December 1855; prepared in accordance with the Act 16 Vict. c. 18, s. 13.

ADVANCES OUT OF THE CONSOLIDATED FUND.

— Nil. —

MONIES PAID INTO THE CONSOLIDATED FUND.

1855:		£. s. d.	£. s. d.
20 January -	Balance of Rents received, Quarter to 31 December 1854 - -	1,475 12 11	
	Interest on 146,000 *l.*, a charge on the London Bridge Approaches Fund, Quarter to 10 October 1854 - - - - - - -	1,374 16 8	
			2,850 9 7
16 February -	Surplus of the London Bridge Approaches Fund, Quarter ended 5 January 1855 - - - - - - - - - -	34,848 8 5	
	Interest on charge of 146,000 *l.*, for the like period - - -	1,374 16 8	
			36,223 5 1
20 April -	Balance of Rents received, Quarter to 31 March 1855 - - - - - -		1,531 7 11
25 May - -	Surplus of the London Bridge Approaches Fund, Quarter ended 5 April 1855 - - - - - - - - - - -	29,343 15 4	
	Interest on charge of 146,000 *l.*, for the like period - - -	1,374 16 8	
			30,718 12 -
13 July - -	Balance of Rents received, Quarter to 30 June 1855 - - - - - -		1,206 12 -
9 August -	Surplus of the London Bridge Approaches Fund, Quarter ended 5 July 1855 -		34,840 2 1
25 October -	Balance of Rents received, Quarter to 30 September 1855 - - - - -		1,610 4 9
1 December -	Surplus of the London Bridge Approaches Fund, Quarter ended 10 October 1855 - - - - - - - - - -	33,041 10 6	
	Interest on charge of 146,000 *l.*, for the Half-year to ditto - -	2,725 6 8	
			35,766 17 2
		£.	144,747 10 7
Note :—			
Total Amount advanced under the provisions of the Act 16 Vict. c. 18 - - - - - -			1,129,397 - 2
Deduct,—			
Total Amount repaid to Consolidated Fund, viz.:		£. s. d.	
To 31 December 1853 - - - - - - - - -		128,085 16 6	
„ „ 1854 - - - - - - - - -		160,181 9 5	
„ „ 1855 - - - - - - - - -		144,747 10 7	
			433,014 16 6
		£.	696,382 3 8
Deduct also,—			
Purchase money of that portion of the Property held in trust by the Commissioners of Works, &c., for the Consolidated Fund, under the provisions of the Act 16 Vict. c. 18, transferred, in exchange, to the Land Revenues of the Crown, by Act 18 & 19 Vict. c. 95. (Downing-street Public Offices.)			120,600 - -
Balance due to the Consolidated Fund on 31 December 1855 - - - £.			575,782 3 8

Examined, *W. G. Goodliffe*, Book-keeper.

Office of Her Majesty's Works and Public Buildings, 31 January 1856.

B. Hall,
First Commissioner of Her Majesty's Works and Public Buildings.

Chelsea Embankment.

hall Bridges, was brought under the notice of the Commissioners by their President, the Duke of Newcastle, then Earl of Lincoln, and Chief Commissioner of Her Majesty's Woods, &c., in consequence of communications made to him by the late Mr. Thomas Cubitt, who, holding river frontage as a tenant of the Crown, was under engagement to embank that frontage, and whose operations had been long delayed by the want of an authorised line of embankment on which he could proceed.

The irregularity in the width of the river between Battersea and Vauxhall Bridges, the great extent of the north shore, occupied by mud banks, and the disruptions made by the stream upon the river boundary, rendered an embankment of this part of the river desirable, and the Metropolitan Improvement Commissioners considered that,* by securing a large portion of the Middlesex shore from encroachment for ever on the river side by a defence against the further inroads of the tide, and on the shore by the interposition of a public road between the river and the several properties on the line, it would permanently enlarge the sources of public convenience, recreation, and health; and that, whether looking to the defective condition of much of the inhabited portion of Chelsea, or to the spaces yet remaining to be covered with buildings in the immediate vicinity (the appropriation of which would be necessarily influenced by any measure of this kind), its separate and independent claims to consideration as a great local improvement were very great, and the Commissioners, finding that the embankment could be dealt with on the principle of individual contribution from the proprietors and lessees of river frontage, directed me to lay down the line of embankment, and to prepare the plans, sections, specifications, and estimates for the work.

On the completion of these services the Commissioners proceeded with their inquiry by oral evidence and written communications with the several proprietors and lessees of river frontage, and other parties affected by the proposed work, and finally submitted their views to Her Majesty in their Report, dated the 7th May 1845.

The state of the river frontage when the Metropolitan Improvement Commissioners commenced their inquiry may be thus described:

Beginning at the Vauxhall Bridge Wharf, the Crown property extended from the river side northwards to the public road leading from Vauxhall Bridge Road to Thames Bank; the river bank being broken away and encroached upon by the stream, and showing remains of old campsheathing on the shore between the high and low water lines, the outlet of the King's Scholars' Pond Sewer formed the western limit of this property, shoaling the river, and contaminating the air by its deposit on the shore. This is the frontage which Mr. Cubitt was under engagements to embank. The wharf of the Equitable Gasworks abutted upon it on the west, 30 feet in advance of the public road, which was here very much contracted, but during the progress of the embankment arrangements were made by the Commissioners of Her Majesty's Woods, &c., and the Commissioners of Sewers, by which the sewer was extended to the line of the gasworks wharf, and the road considerably widened, at the expense of the Board of Woods, who formed a wharf over the sewer.

The frontage of the Marquess of Westminster, leased to Mr. Cubitt, commenced at the west boundary of the Equitable Gasworks, and continued to Baker's-lane, now Caledonia-street. It was partly formed of timber campsheathing, and partly of brick walls; the ground between the river side and the public road, up to the Ranelagh-street, for a length of 1,600 feet, being used as wharfs for Mr. Cubitt's business, and of open spaces, the frontage in many parts being disrupted by the river.

Between Ranelagh-street and Caledonia-street a public footpath formed the river boundary, and this footpath extended from Caledonia-street to the Chelsea Waterworks premises; Mr. Octavius Smith having the right of landing goods upon it,

* *See* Second Report of the Commissioners for Metropolitan Improvements, 7 May 1845.

it, on his leasehold under Lord Westminster, and Messrs. Grace & Renny having the same right as the lessees under Mr. Sloane Stanley. Chelsea Embankment.

Between the east end of the Chelsea Waterworks premises and the grounds of Chelsea College there was no access to the river, excepting at the White House Ferry and the stairs beyond it. The frontage was occupied by the Chelsea Waterworks Company as a wharf and garden frontage, by the entrance to the Grosvenor Canal, and by the business premises of the lessees of the Waterworks Company; viz., Mr. Thorne's malthouse, &c.

The entire shore of the river from this point to Caledonia-street, a length of 2,500 feet, formed a mud bank.

Some property facing the river, which had formed a site for the works of the Grand Junction Waterworks Company, was purchased by the authorities of Chelsea Hospital, but not appropriated. The orchard and meadow of Chelsea College, and the Plane Tree Walk, abutting on the river, were not accessible to the public or the College pensioners; but in consequence of suggestions made by the Metropolitan Improvement Commissioners, their communications with the authorities of the College, and the recommendations in their Report to Her Majesty, the fences of the meadow and orchard were subsequently removed, the canals were filled up, and the grounds and river terrace were opened to the public. These improvements were carried into effect while the Duke of Somerset (then Lord Seymour) was Chief Commissioner of Her Majesty's Woods, &c.

Through the recommendations of Her Majesty's Commissioners, a public carriage road was also formed across Burton's-court, between Royal Hospital-row and Paradise-row, Chelsea, which saved a distance of 370 yards between those two streets; Burton's-court was also re-opened for the public recreation, after it had been closed during many years.*

Between Chelsea College and the east end of Cheyne Walk, the river frontage consisted of private property, part of which was garden frontage, including that of the Botanic Gardens, and the remainder business premises, which since 1844 have been increased by Mr. Druce having converted a part of the garden of Gough-house into a wharf. Reference to the Second Report of the Metropolitan Improvement Commissioners, and the Appendix, will show the steps taken by the Commissioners to induce a transfer of the establishment of the Botanic Gardens from Chelsea to Kew Gardens; and the evidence† of Sir W. J. Hooker, Dr. Pereira, and Dr. Iliff on this subject, will show the advantages to be derived from the change.

Along the entire frontage of Cheyne Walk the public have free access to the river, but, excepting on the embankment formerly made at the Cadogan Pier, the space between the north footpath and the river wall is very limited, and the trees on the bank, which form so beautiful a feature of this metropolitan suburb, are on the decline.

The arrangements proposed by the Metropolitan Improvement Commissioners to the owners or lessees of frontages along the line of the proposed embankment were based on the principle of contributions by these owners or lessees‡ of half of the estimated cost of the works in front of their respective properties, and of their proportion of compensation for which the land embanked in front of such property on the north side of the public roadway was to be transferred to the proprietors, while the public were to have the benefit of the roadway and promenade by the river side.

On the accompanying Plan is shown the extent on the embankment line, of the river frontage between Vauxhall Bridge and the west end of Cheyne Walk, the subdivisions of the frontages, according to their several proprietors, being distinguished

* *See* evidence of Mr. Joveland, and of Messrs. Chalwyn, Perry & Maynard, Appendix, Second Report, p. 36 to 40.

† Second Report, p. 40 to 47.

‡ Mr. Cubitt and the Chelsea Waterworks Company were the contributing lessees, the former holding leases under the Crown and the Marquess of Westminster, and the latter holding a lease of part of Lord Westminster's property under Mr. Cubitt.

Chelsea Embankment.

distinguished by letters, and their lineal dimensions are given in the following Table:—

NAMES of OWNERS.	Letters on Plan.	DESCRIPTION of PROPERTY.	Length on Line of Embankment Wall.	
			Feet.	*Feet.*
Earl of Cadogan -	A. to D.	Cheyne Walk - - - - -	1,567	
		Wharf Property, Business Property, Boat Houses.	286	
		Frontage to the Botanical Gardens -	424	
				2,277
Miss Howe - -	D. E.	Business Premises - - - -	200	
Colonel Talbot - -	E. F.	Business Premises - - - -	65	
Lord Calthorpe - -	F. G.	Wharf Property; Lady Willoughby Gordon.	256	
				521
		Garden - - - - - - -	440	
The Crown - -	X. Y.	Adjoining Vauxhall Bridge; Wharf leased to Mr. Cubitt.	700	
				1,140
The Public - -	I. K.	Chelsea Hospital Grounds - -	625	
	L. M.	Land adjoining the Chelsea Hospital Grounds.	310	
	M. N.	Land purchased of the Chelsea Waterworks Company adjoining Chelsea Bridge.	440	
	N. O.	Chelsea Bridge - - - -	165	
	K. L.	Ranelagh Sewer - - - -	65	
				1,605
Marquess of Westminster.	O. P.	Ground and Entrance to the Grosvenor Canal.	227	
Ditto - - -	P. Q.	Ground leased to Mr. Cubitt; sublet to Chelsea Waterworks.	510	
Ditto - - -	T. U.	Leased to Mr. Smith - - -	440	
Ditto - - -	U. B.	Frontage to Caledonia-street - -	140	
Ditto - - -	B. V.	Leased to Mr. Cubitt - - -	2,519	
				3,836
Chelsea Waterworks Company.	Q. R.	Dock and Ground occupied by the Chelsea Waterworks.	- -	140
Mr. Sloane Stanley -	R. S. T.	Ground occupied by Grace's White Lead Works, and Ground leased to Mr. Cubitt.	- -	390
Equitable Gasworks Company.	V. W.	- - - - - - - -	- -	67
Vauxhall Bridge Company.	Y. Z.	- - - - - - - -	- -	70

Of the Dimensions of the Roadway, the First Estimate, and Contributions.

The dimensions of the embankment taken in the estimate were 50 feet in width from Ranelagh-street to the Chelsea Hospital grounds, and thence westward 40 feet in width, and the height of the coping was fixed at 3 ½ feet above Trinity high-water mark; the bridges were to be of timber, and the roadway and footpaths to be gravelled; and for these dimensions and mode of construction, my estimate of the expense of the work amounted to 77,000 *l.*; and the sum for compensation, as estimated by the late Mr. Higgins, amounted to 16,500 *l.*, making a total of 93,500 *l.*

To enable the Commissioners to judge of the correctness of this estimate, the quantities were submitted to three eminent contracting firms, whose estimates for the works were respectively 95,315 *l.*, 69,850 *l.*, and 64,907 *l.*

Assuming the entire responsibility of the embankment to devolve upon the Government, and that the contributors should be guaranteed beyond a given amount, Her Majesty's Commissioners applied to Mr. Thomas Cubitt to ascertain if, in consideration of his interest in the measure, he would undertake the execution of the work without profit, and Mr. Cubitt having had the quantities revised, expressed

expressed his readiness,* provided the works were simultaneously proceeded with, to undertake the execution of the work at 75,425 *l.*, to execute it in the most prompt manner possible, and at the lowest cost, so that if the work could be done for anything below the estimate, the Commissioners and the respective contributors should have the advantage of it. Chelsea Embankment.

Upon Mr. Cubitt's estimate and offer to undertake the work, Her Majesty's Commissioners were enabled to apportion the amounts to be paid by each contributor; but of the owners and lessees named in the foregoing list, those whose contributions fulfilled the conditions of the Metropolitan Improvement Commissioners were the following, viz.:

Her Majesty, in right of Her Land Revenue, for frontage held by Sir Willoughby Gordon, an amount of 1,903 *l.* 10 *s.* 6 ½ *d.*

2d. The Marquess of Westminster, for the frontage in his Lordship's own occupation, and property leased to Mr. Octavius Smith, an amount of 8,123 *l.* 19 *s.* 7 *d.*

3d. The Chelsea Waterworks Company, for their own freehold, and also for land the property of Lord Westminster, but held on lease by the Company under Mr. Cubitt, an amount of 10,403 *l.* 6 *s.* 2 ½ *d.*

A contribution from Lord Cadogan of 5,551 *l.* 19 *s.* 7 ½ *d.* was to depend upon the removal by Government of the block of houses between the west end of Cheyne Walk and Battersea Bridge, and a contribution of 1,193 *l.* 1 *s.* 2 ½ *d.* in respect of the embankment in front of the Botanic Gardens, was to depend upon his Lordship becoming possessed of that property, in which he has a reversionary interest.

The contribution† from Mr. Sloane Stanley was to be made in the shape of a surrender of rents for the freehold of wharfs belonging to him near Battersea Bridge, in the event of the removal of the block of houses according to Lord Cadogan's stipulation.

Lord Calthorpe and Miss Howe objected to any contribution, on the ground that their property would not be improved, and Colonel Talbot, who was abroad, was assumed to be dissentient also.

Mr. Cubitt undertook to complete at his own cost, estimated at 14,779 *l.* 8 *s.* 8 *d.*, the embankment in front of the property held by him of the Crown and of the Marquess of Westminster, and to give up part of the land between the road and the river for the recreation of the public.

It thus resulted that the contributions which could be relied on towards the expense of the work and compensation amounted to 35,210 *l.* 14 *s.* 11 *d.*, or, if Mr. Cubitt executed his embankment by his own workmen, to 20,430 *l.* 16 *s.* 3 *d.*, and that the contributions from Lord Cadogan depended upon conditions, in the fulfilment of one of which, viz. the removal of the houses between Cheyne Walk and Battersea Bridge, depended also the surrender of rents by Mr. Sloane Stanley, estimated as a contribution from that gentleman.

Acts of Parliament and subsequent Proceedings.

In the year 1846, an Act of Parliament was obtained by the Commissioners of Her Majesty's Woods, &c., for the formation of the embankment, in which the commencement of the work was made dependent upon the completion of certain agreements to be entered into between the Board of Woods, &c., and the several owners or lessees contributing to the expense of the work, and I believe it was in consequence of the obstacles which arose to prevent the completion of those agreements that any regular commencement of the works by the Office of Woods, &c., was deferred.

Mr. Cubitt, however, proceeded with his portion of the embankment between the years 1849 and 1854, and during the formation of the abutments of Chelsea Bridge it was found desirable that portions of the embankment immediately adjoining

* Letter, 26 March 1844, Appendix (B.), and Letter, Appendix (C.)
† This contribution was estimated at 3,000 *l.*

Chelsea Embankment.

adjoining that work should be formed on both sides of the river, to the extent of 200 feet in the aggregate.

There being little prospect of completing the agreements, an Act of Parliament was obtained by the Commissioners of Her Majesty's Works in the year 1853, which authorised the construction of that part of the general embankment which is comprised between Vauxhall Bridge and the west end of the Chelsea Hospital property before the completion of the agreements with the contributors, and steps were then taken for the formation of the embankment westward of Mr. Cubitt's leasehold property.

Previously to any proceeding with the work, I was instructed by the late Chief Commissioner, Sir William Molesworth, to revise the plans and to report upon the subject with reference to the cost, and the Chelsea Waterworks Company having stipulated that the roadway in front of their premises should be 70 feet in width, it was determined that this width should be continued eastward to the Equitable Gasworks frontage; that the width of the roadway to the westward, also, should be increased, and that the height of the embankment above high-water mark should be raised. These additions, together with the approaches from the embankment to the foot of Chelsea Bridge, for the embankment at the west end of Cheyne Walk, and for constructing the bridges, &c., with iron girders instead of timber, produced an estimate for the work of 92,579 *l.*

Mr. Pennethorne also surveyed the property required to be purchased and estimated the amount of purchase and compensations at 53,174 *l.*, making a total of 145,753 *l.*

A length of 900 feet of the embankment (in front of Mr. Sloane Stanley's freehold, occupied by Messrs. Grace and Renny, and in front of Lord Westminster's freehold, occupied by Mr. Octavius Smith) was then submitted to competition, and Mr. Jay's tender being the lowest, he was employed to execute the works; but pending arrangements with Mr. Octavius Smith, for satisfying his claims for interference with his frontage, the work of this contract had to be prosecuted at the west end, and to be commenced at the low-water line at a distance of 170 feet from the shore, and the work was prosecuted under great disadvantages.

After several communications between the Board and the agents of Lord Westminster and those of the Chelsea Waterworks Company, plans were signed on the part of the respective parties and the Board of Works for the remainder of the line of embankment to the west end of Chelsea Hospital grounds.

A portion of the embankment contiguous to Chelsea Bridge had been let to Mr Earle, but was discontinued by that contractor, and this portion, together with the embankment in front of the Chelsea Waterworks Company's property, and in front of the property of the Marquess of Westminster, eastward of the Middlesex abutment of Chelsea Bridge, was contracted for by Mr. Thomas Jackson. This part of the embankment eastward of the bridge is 950 feet in length, and contains a dock entrance to the Grosvenor Canal, a dock to the Chelsea Waterworks Company's premises and two bridges.

The remainder of the embankment westward of the Chelsea Bridge, and extending to the western limits of the Chelsea Hospital grounds, has also been let to Mr. Jackson.

Of the Yearly Progress of the Embankment.

The lengths of the embankment formed in each year are the following:—

In 1849, 300 feet of the Crown property was embanked by Mr. Cubitt.

In 1850, 250 feet of the same property.

In 1851, 200 feet of the same property.

And also 780 feet of property leased by Mr. Cubitt under Lord Westminster.

In 1851 there were also executed 50 feet of the embankment contiguous to the Middlesex abutment of Chelsea Bridge by Mr. Earle, the contractor, making, with the embankment formed by Mr. Cubitt, a total length of 1,030 feet in the year 1851.

In

In the year 1852 there were executed 150 feet of the embankment near the Chelsea Bridge by Mr. Earle, and 900 feet of embankment in front of Lord Westminster's property, by Mr. Cubitt, making a total of 1,050 feet. Chelsea Embankment.

In 1853, 400 feet of the embankment in front of Lord Westminster's property were completed by Mr. Cubitt.

In 1854, Mr. Cubitt added a length of 386 feet to the embankment, completing the work in front of his leasehold property held under Lord Westminster. Mr. Jay formed 529 feet of the embankment in front of Mr. Sloane Stanley's property, and of Lord Westminster's property, leased to Mr. Octavius Smith, also 323 feet of dock walls; and Mr. Jackson executed 180 feet of the river wall westward of the Chelsea Bridge. These lengths give a total of river wall for 1854 of 1,095 feet.

In the year 1855 Mr. Jay executed 371 feet of embankment in front of Lord Westminster's property, leased to Mr. Octavius Smith, and 185 feet of dock walls, completing the length of river wall undertaken by him; and Mr. Jackson executed 270 feet of the river wall east and west of the bridge, and a length of wall at the Grosvenor Canal laybye of 196 feet; making a total of 641 feet of river wall, and 381 feet of dock walls.

In the present year Mr. Jackson has constructed 200 feet of river wall, and a length of 280 feet of wall at the Grosvenor Canal entrance.

Thus there have been completed of the river wall of the embankment 4,966 feet, besides 984 feet of walls to docks, leaving a length of 1,502 feet to be executed to complete the embankment to the west end of the Chelsea College property.

The length of the embankment executed by Mr. Cubitt was close to the old frontage, the ground was favourable for a good foundation, and the work was found comparatively easy of execution; but in the work which has been done by Mr. Jay and Mr. Jackson great difficulties have been experienced in the foundations owing to blowing sand being met with; and I found it requisite to employ sheet piling in the foundations along the frontage of the river wall, also to form inverted arches under the dock entrances, and to construct the side walls at the Grosvenor Canal entrance on bearing piles, which operations, and the increased depth, have added to the cost of this part of the work.

The embankment between Mr. Sloane Stanley's premises and the west end of the premises recently occupied by Mr. Thorne includes the area of a great mud bank, its greatest projection from the river boundary being 230 feet. Hence, from the position of the river wall, and the nature of the ground, it is subject to considerable difficulty.

The necessity for providing during the execution of the works for the entrance and discharge of craft at the several premises has been attended with minor difficulties and delays, and these requirements, which are more important at the entrance to the Grosvenor Canal in consequence of so many vessels having to pass and repass, and the delay occasioned by the difficult character of the foundations in that entrance, have prevented the progress of the embankment in front of the premises of the Chelsea Waterworks Company, whose existing dock and landing-place having to be kept open for their use as well as a temporary entrance to the Grosvenor Canal, rendered it almost impracticable to prosecute the works from the east end.

The walls of the Grosvenor Canal entrance are now nearly high enough for the formation of the bridge, and the embankment will then be pushed forward so as to complete the communication between Vauxhall Bridge and the Chelsea Bridge, and the new street now in progress of formation through the Ranelagh property of Mr. Brett.

The works executed for the lessees of Lord Westminster and Mr. Sloane Stanley in lieu of compensation, and the extra works in the foundations, have amounted to 6,700 *l.*, and calculating on the necessity for piling the foundations between the east and west points of the work to be executed before the Chelsea Waterworks premises, and also a quantity of earth to be obtained for filling at a low rate, I have estimated that 32,500 *l.* would be required for completing the

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works to the west end of Chelsea College property, and a sum of 28,500 *l.* for the embankment from thence to the west end of Cheyne Walk.

It was the desire of one of the contributors, the late Marquess of Westminster,* as stated in the letter of Mr. Howard, his Lordship's agent (in which also the present Marquess expressed his concurrence), that some portion of the embanked ground in front of his Lordship's freehold should be planted and devoted to the use of the public. Mr. Sloane Stanley also expressed his willingness that the ground in front of his freehold should be similarly appropriated.

These portions being under lease, difficulties arose on the part of the tenants of these proprietors, whose rights and convenience were affected by the work, which prevented the suggested appropriation being carried into effect, and it was found requisite when the Bill was before Parliament to consider those interests in the arrangements made for the occupation of those portions of the embanked land.

Vide Plans at the end.

In order to show more distinctly the appropriation of the ground, enlarged plans of the several river frontages from the Equitable Gasworks to the west end of the Chelsea College ground are appended to this Report.

The greater part of the frontage of Mr. Cubitt's leasehold, up to the Belgrave Dock, is from 25 to 60 feet from the old line of river boundary.

The appropriation of this frontage as far west as Ranelagh-row, is shown on Plan No. 2, which is a copy of the plan signed by the late Chief Commissioner and Mr. Cubitt. In the Act of Parliament (16 & 17 Vict. c. 87) clauses were introduced providing for the enclosure of this ground by iron railing, the planting a belt of shrubs round it, the division of the property and access to it, with prohibitions against any buildings above 14 feet in height being constructed on the ground, except cranes and travellers, or any appropriation of it for steam engines. The spaces open to the public in this division, besides the roadways, are of the respective lengths of 340 feet and 400 feet.

From Ranelagh-row to Caledonia-street, the new roadway occupies the former river frontage, the public footway, and all the embanked land, besides the site of a house and garden, which was added to the road by Mr. Cubitt.

A small slip of ground between the roadway and the gardens of the houses on the north side remains to be appropriated.

Plan No. 3 shows the appropriation of the land between the public road and the present garden fence of Lord Westminster's freehold, leased to Octavius Smith. The ground is to be given to the proprietor, and to be occupied by Mr. Smith during the term of his lease, subject to a yearly rent of 5 *s.*, payable to the Commissioners of Her Majesty's Works, but not to be used for buildings.

Plan No. 4 shows the land between the public roadway and the freehold of Mr. Sloane Stanley, the length from A to B being occupied by Messrs. Grace and Renny. The ground is to vest in the owner and occupier, but not to be built upon without the consent of the Commissioners of Works, &c. The length from B to C is occupied by Mr. Cubitt, partly for building ground and an open street, partly for the gardens in front of the buildings.

This plan also shows the land in front of the Chelsea Waterworks freehold and leasehold property.

The space between the roadway and the old line of shore is to be used as building ground, according to terms under which they agree to contribute.

Of the area between the embankment line and the entrance to the Grosvenor Canal, in Lord Westminster's own occupation, very little space remains after deducting the bridge over the new entrance, the laybye, and the approaches to Chelsea Bridge.

On the same plan is shown the arrangement in this part of the frontage, and it will be seen that a space which may be open to the public remains between the

* *See* letters from Lord Westminster's agent, Mr. Howard, to the Earl of Lincoln, Second Report, Appendix, p. 110.

the river wall and the south boundary of the new road on each side of Chelsea Bridge. Chelsea Embankment.

The approach on the west side of the bridge and the roadway to Chelsea College will occupy most of the embanked land between the bridge and the college, but there will be a space of 400 feet in length, by an average depth of 50 feet, in front of the premises purchased by the Board of Works, which might be left open if the arrangements for the buildings on the site would permit.

— II. —

THE CHELSEA BRIDGE.

In connexion with the inquiry of the Metropolitan Improvement Commissioners on the subject of forming a public park in Battersea Fields, the project for constructing a bridge across the Thames, near the Red House, was brought under their notice, and Mr. Pennethorne was instructed to revise his estimate for the park on the basis of a communication being formed across the river, between the proposed park and the valuable portions of the town formed of late years west of Hyde Park Corner. At the same time I was instructed to prepare designs for a bridge, of which the Commissioners approved, one for a suspension bridge, 40 feet in width, at a cost of 60,000 *l.*, and the project was sanctioned by Parliament, date 1846. Chelsea Bridge.

Subsequently I was instructed to make designs for a bridge of seven arches, faced with stone, and for a cast-iron bridge of five arches, which were under consideration by the Commissioners; but when proceedings were taken for the commencement of the work, the Duke of Somerset (then Lord Seymour, and Chief Commissioner of Her Majesty's Woods, &c.,) decided to carry into execution the suspension bridge named in the Act; and in order to obtain greater space at the piers for the passage of carriages, the drawings were made out in 1850 for piers of iron, the foundations being formed of timber bearing piles and concrete, enclosed within cast-iron piles and plates. The works of the two river piers, up to seven feet above Trinity datum, were undertaken by Mr. Earle, the contractor, whose tender was the lowest of nine. The work was commenced, and the first certificate given in May 1851. The works of the land moorings on the Middlesex and Surrey sides of the river were also commenced by Mr. Earle at the close of the year 1851, and his tender for the cast-iron framing supporting the saddles and chains, being the lowest tender for that work, was accepted in October of the same year.

The works of the pier foundations were completed in the beginning of 1853, and the fixing of part of the tower contract was commenced; but in consequence of remonstrances from me on the delay with the land mooring works, and difficulties as to payment, owing to the want of funds, the contractor's manager, in his absence, ceased to proceed with the works, and ultimately certain matters in dispute were submitted to arbitration, in consequence of which proceedings the bridge works were suspended.

A considerable portion of the lower parts of iron framing for the towers had been cast, and in order to save time and expense of new patterns, a tender by Mr. Whitehouse (who had made the castings) for completing this contract was accepted by the Board in 1854.

The chains, saddles, and suspending rods had been let to Messrs. Howard & Ravenhill, of the King and Queen Works, Rotherhithe, whose patent method of forming the heads of the links without welding has supplied a desideratum long felt for suspension bridges of iron bars.

The ornamental casing of the towers, the longitudinal and transverse girders, handrail, &c., and the fixing of the chains, were undertaken by Messrs. Young, of Edinburgh.

Considerable delay has occurred in the execution of the work undertaken by Mr. Whitehouse, which legal proceedings or "taking possession of the works"

Chelsea Bridge.

would have most probably increased. His operations are now, however, on the eve of completion, and the works will then be placed in the hands of Messrs. Young, for fixing the chains, the roadway, and the casing, all of which are in such a state of forwardness as to secure the opening of the bridge this year.

The construction of the Middlesex land mooring works was attended with much difficulty, delay, and expense, in consequence of running sand in the area of the site, and extra piling, sheet-piling, concrete, and brickwork were required in this part of the work.

The difficulties were, however, successfully overcome, but, with the change of contractors, removal of plant, &c., they involved an additional expense, not only in this portion of the work, but in the abutments and towers; an extra cost of 8,400 *l.* being incurred beyond the sum at which these works had been contracted for.

As the construction of the piers of the Chelsea Bridge differs from the mode used in the other metropolitan bridges, and as they have been built without coffer-dams, it may be interesting to give a brief description of this part of the work.

The piers are each 88 feet in length by 19 feet in width, with curved cutwaters; thus forming an area of 1,425 square feet in each. Over this area, bearing-piles of English elm were driven, at distances of 3 feet 6 inches apart, to an average depth below low water of 32 feet, and to a test which secured a considerable resistance.

Round this area of bearing-piles, cast-iron piles, 12 inches in diameter and 27 feet in length, were driven into the ground, and between these piles cast-iron plates were driven, so that the whole area of the piers was enclosed with an iron casing 20 feet in depth below low-water line. The iron piles and plates and timber piles were secured together with iron tie bars, the ground of the river bed dredged, and concrete filled in to a level of two feet above low water. On this concrete and piling were laid foundation slabs of Yorkshire stone for the base of the cast-iron towers.

Above the low-water line vertical ribs were fixed on the cast-iron piles, and iron plates were carried up between them; the whole terminated by a large curb moulding, seven feet above the level of Trinity high-water mark. Thus, the surface of the iron casing in each pier is 164 feet in length, by a depth of 43 feet for the plates, and 48 feet for the piles. That part of this surface which is above the stone floor has been laid with brickwork, and forms now a large water-tight caisson or chamber, in which the ironwork of the towers is constructed.

The iron below the low-water line was coated, when hot, with a protecting coating, and the parts above that line were painted.

It will be seen that the bearing parts of the foundations are similar to those of London, Southwark, and Waterloo Bridges, being on bearing-piles, with the addition of concrete, but that the resisting surface, which bears the weight of the bridge, is at a higher level, and consequently the superstructure is lighter than if carried down considerably below the bed of the river.

The cast-iron framing and columns forming the supports of the saddles and chains are embedded in the stone landings, and carried up to a height of 57 feet above high water. These framings will have upon them, by the weight of the bridge itself, a pressure of 1¾ tons per square inch, and, if the bridge was loaded, a pressure of 3¼ tons per square inch.

The roadway of the bridge is formed and supported thus:

Two wrought-iron longitudinal girders, six feet in depth, extend the whole length of the bridge; they are suspended by the rods from the chains, and their aggregate length is 1,412 feet. Between these girders are fixed the transverse girders, also of wrought iron, 87 in number, and between these transverse girders are fixed the wrought-iron bearers for the roadway plates, 810 in number. Upon the plates themselves, also of wrought iron, is laid asphalte concrete for the pavement.

The footways are carried by wrought-iron cantilevers, 166 in number, fixed to the longitudinal and transverse girders.

"The

Chelsea Bridge.

The bridge therefore is almost strictly an iron bridge, of great stiffness and strength, and no load which can possibly be brought upon it can strain the chains to within five tons per square inch of section of the strain which has already been applied to them.

Remarks on the Test for the Chains.

In the experiments made by me on the effects of tension on iron, I found that by comparing the stretch and permanent set on ordinary iron, and the best iron prepared for the purpose of experiment, there was no perceptible difference between the two up to 11 tons on the square inch of section; even up to 12 tons the difference was very slight, but at 13 tons the permanent set in the common iron was very decided, and at 23 tons on the inch, when the ordinary iron broke, having stretched six inches in four feet.

The best iron had not stretched permanently $\frac{1}{12}$ of an inch in four feet; the permanent set of this iron with 29 tons was $1\frac{1}{50}$ inch, and it broke with 31 tons.

I was therefore satisfied that, in order to render a proof test efficient to distinguish between ordinary iron and best iron, it should not be lower than 12 tons, and that it would be desirable to obtain a higher result, and I accordingly finally fixed the test on the bridge bars at $13\frac{1}{2}$ tons the square inch of section, with a permanent extension of $\frac{1}{400}$ of an inch per foot. Every bar of the bridge has been carefully proved to this test, and as there are 1,772 bars in the whole, without the bars at the mooring plates, this operation has been one of importance.

With relation to the cost of the Chelsea Bridge, it may be interesting to compare the cost of the several metropolitan bridges with the aggregate area of the roadway and footpaths afforded by each for the public traffic, which area, independently of their architectural features, constitutes their utilitarian value as public structures.

Taking the length from the extreme of the abutments in the arched bridges, and from the extreme of the land mooring works in the suspension bridges, those areas, and the cost per superficial foot, will be nearly as shown in the subjoined Table.

TABULAR STATEMENT of the Area of the Roadways and Footways, and Cost per Superficial Foot, of the several Metropolitan Bridges.

NAME of BRIDGES.	Length, including Abutments or Moorings.	Width between the Parapets.	Area of Roadway and Footpath.	Cost of Bridge.	Cost per Square Foot of Surface.	MATERIAL of BRIDGE.
	Feet.	*Feet. In.*	*Feet.*	£.	£. *s.* *d.*	
London Bridge - - -	904	53 6	47,912	542,150	11 6 –	Granite.
Southwark Bridge - -	800	42 6	34,000	384,000	11 5 10	Iron arches, stone piers.
Blackfriars Bridge - -	995	42 0	41,790	157,840	3 15 6	Stone.
Waterloo Bridge - -	1,380	41 6	57,270	579,915	10 – –	Granite.
Hungerford Suspension Bridge - - - -	1,536	13 4	20,480	98,760	4 16 6	Brick and stone piers, timber platform.
Westminster Bridge - -	1,160	43 0	49,880	*389,500	7 16 –	Portland stone.
Vauxhall Bridge - -	840	36 2	30,380	300,000	9 16 –	Iron arches, stone piers.
Chelsea Suspension Bridge -	922	45 0	41,490	†88,000	2 2 5	Iron piers and roadway.

Note.—The New Westminster Bridge, taken at the sum named in Sir William Molesworth's Report, viz., 235,000 *l.*, would cost 2 *l.* 8 *s.* 6 *d.* per foot superficial.

The bridge is now 47 feet between the railings, including the chains: it contains 4,610 superficial feet more than the original design, and is one-ninth larger than that

* For bridge and approaches, *see* Evidence of Mr. Williams before the Committee on Metropolitan Bridges.

† Including approaches.

Chelsea Bridge.

that structure. The girders and plates for the roadway are of iron instead of timber; the lodges provide eight dwellings instead of four; the towers are of iron instead of bricks, and the casing of an ornamental character; and yet with all the expenses in the Middlesex abutment, the expense thrown upon the work by the failure of one contractor, and the change to another, and the expenses caused by delay, the total cost of the work will not exceed 88,000 *l.*, of which 50,407 *l.* has been certified for.

In closing this Report upon the history and progress of the Chelsea Embankment and Bridge, I ought to mention that I have given all the information which my own knowledge and the documents in my possession have enabled me to state; but for a fuller account, if required, the able Second Report of Her Majesty's Commissioners must be referred to, and the records of the department must be consulted, both with reference to negotiations with the contributors to the embankment and to the want of funds for the bridge, and, except in the engineering branch, a history of the proceedings would probably have been better given by the department than by me.

Desirous, however, of affording the First Commissioner all the information sought for, I have endeavoured to convey, in a brief manner, the leading features of the subject, and it will be seen by reference to this Report that Her Majesty's Commissioners for Metropolitan Improvements completed, as far as it was possible for them to complete, all the preliminaries of this great improvement, and that if Mr. Cubitt's offer could have been acted on it is probable the entire work would have been opened to the public some years ago.

It will be seen that the embankment and roadway are on a grander scale than at first contemplated, and that the construction is of a more durable character, while the cost to the public of the improvement up to the point last sanctioned by Parliament in the Act of 1853, the west end of Chelsea College grounds, will, deducting the amounts to be paid by the contributing owners and lessees, not exceed 43,000 *l.*, for which the banks of the river to an extent of 4,570 lineal feet have been secured for the use and recreation of the public, the greater part of which length consisted of mud banks most noxious to the health of the district.

It will also be seen by the tabulated statement of the metropolitan bridges that the Chelsea Bridge, notwithstanding the ornamental character of its design, and the high quality of its iron, is, compared with the cost and area of the other bridges, considerably more economical; thus, compared with London Bridge and Southwark Bridge, its cost per foot superficial would be as 2 *l.* 3 *s.* to 11 *l.* 6 *s.*; compared with Waterloo Bridge, as 2 *l.* 3 *s.* to 10 *l.*; compared with Blackfriars Bridge, as 2 *l.* 3 *s.* to 3 *l.* 15 *s.*; compared with Hungerford Bridge, as 2 *l.* 3 *s.* to 4 *l.* 16 *s.*; and without comparing the design with the noble granite structures on the river, the result is satisfactory, as showing the extent of bridge accommodation of an ornamental character, which can, under difficult circumstances, be economically obtained.

I am, &c.

The Right Hon. Sir B. Hall, Bart., M.P., First Commissioner of Her Majesty's Works, &c.

(signed) *Thos. Page.*

— III. —

NEW STREET FROM LOWER SLOANE STREET TO CHELSEA BRIDGE.

General Report.

New Street from Lower Sloane-street to Chelsea Bridge.

7 May 1845.—The Commissioners for the Improvement of the Metropolis by their Second Report recommended the formation of an embankment on the northern shore of the River Thames, between Battersea and Vauxhall Bridges, and also the formation (in concert with the Rev. J. G. Brett) of a road, in continuation of Sloane-street, southwards to the river; and 23 July 1845, by their Fifth Report, the said Commissioners recommended the construction of a bridge over the river, opposite to the south end of the said road.

3 August 1846.—The Act 9 & 10 Vict. c. 39, was passed, empowering the Commissioners of Her Majesty's Woods, &c., to embank the river, to construct the bridge,

bridge, and to form the road from Lower Sloane-street, according to the above-named recommendations.

New Street from Lower Sloane-street to Chelsea Bridge.

May 1849.—By the 3d section of the above-named Act, the Commissioners of Woods were restrained from commencing the embankment until the agreements for contribution from the several proprietors should have been entered into, which they were unable to accomplish by reason chiefly of difficulties in settling with one proprietor. The road from Lower Sloane-street was therefore of necessity not commenced; but in May 1849, a particularly favourable opportunity having presented itself for purchasing the malthouses of Messrs. Thorne, near the foot of the bridge, the lease of that property was acquired, at a cost of 6,000 *l.*

December 1853.—The freeholder of a small property known as Clarence House, Wilderness-row, Chelsea, being desirous to part with the same (and it being required for the new street) the Commissioners of Works (now divided from the Woods), agreed to become the purchasers at the price of 1,800 *l.*; but with the exception of the purchase of this property, and of Messrs. Thorne's before named, the whole of the funds available for the improvement generally were applied to the embankment, as being by far the most important part of the undertaking, the more so as the time for the compulsory purchases had by a second Act of Parliament (16 & 17 Vict. c. 87) been extended to the 1st July 1857.

April 1854.—At this time Mr. Brett had pulled down his house, and obtained the approval of the Commissioners of Works to a modification of the plan for the portion of the road to be formed by him across his own ground, and became pressing upon the Commissioners for the formation of the parts north and south thereof; they consequently in this year laid out, ready for formation, the road over the hospital burial-ground from Royal Hospital-row to Mr. Brett's land, for the purpose of giving him access thereto whenever he should desire it. They also entered into agreements to the extent of 19,133 *l.* for the purchase of the lease of the White Ferry House, of the freehold property of the Chelsea Waterworks Company, and of the lease of Mr. J. H. Tuck, in the Ranelagh Wharf (all near to the Chelsea Bridge).

1855.—The Commissioners of Works having by the vote passed in the Session of this year been provided with funds available for the purchase of the properties in White Lion-street, issued notices in September to the several parties interested to make their claims, which when sent in, were referred to the architect, who proceeded to negotiate with the parties, and had concluded all the purchases in March 1856, at the sum of 7,239 *l.* 2 *s.* 6 *d.*, without arbitration or jury.

The purchase of the freehold property of the Chelsea Waterworks Company, before referred to, was not included in the estimate of 1853, but the acquisition of the property has been very advantageous to the embankment in several respects, and the sum of 16,500 *l.* paid for it was agreed to, with an expectation that it would have been resold to Mr. Cubitt at the same price. In consequence of Mr. Cubitt's illness and subsequent death the negotiation with him was not brought to a determination, but the land has been since agreed to be sold to the War Department for barracks for the like sum of 16,500 *l.*, and that amount (under the 111th section of the Act of 1846) will have to be applied to meet the extra expenditure occasioned by the purchase from the Waterworks Company.

Agreements have been concluded for the purchase of all the properties required for the road from Lower Sloane-street to the bridge; immediately those purchases can be completed (Lord Cadogan's being the most important) the houses in White Lion-street may be pulled down, and the road formed from Sloane-street to the north boundary of Mr. Brett's property. The continuation of the road through Mr. Brett's property may be attended with difficulties and delay. The part of the road from the south boundary of Mr. Brett's property to the bridge may be commenced so soon as arrangements have been concluded with the Commissioners of Chelsea Hospital; but the great bulk of this part of the work will consist of the raising of the road near the bridge, which cannot proceed simultaneously with the embankment without interference with that work, and without enhancing the cost of both.

(signed) *James Pennethorne.*

25 April 1856.

— IV. —

BATTERSEA PARK.

REPORT of PROCEEDINGS from the passing of the Act in August 1846 to 31st March 1856.

Purchase of the Lands from 1847 *to* 1855.

Battersea Park.

IN the year 1846, an Act of Parliament was passed to enable the Commissioners of Her Majesty's Woods, &c., to purchase 320 acres of land at Battersea, to be appropriated partly as a park, and partly as sites for houses and ornamental villas, and the Commissioners for the issue of Exchequer Bills for public works were authorised to advance to them monies to an amount not exceeding 200,000 *l.*

Shortly after the passing of the Act the Commissioners of Woods called upon the different parties possessed of interests in the properties required to send in their respective claims; these claims amounted to nearly 500,000 *l.*, and when received were referred to the architect, who reported that, according to his estimates, the cost of purchasing the properties should be about 187,433 *l.* 15 *s.* 11 *d.*; that the cost of the works for forming the park, &c., should be about 53,500 *l.*, and the embankment of the river 25,000 *l.*; altogether 265,933 *l.* 15 *s.* 11 *d.*, exclusive of any interest that might become payable on borrowed monies and on purchases.

The Commissioners of Woods having received from the Exchequer Bill Loan Commissioners an advance of 40,000 *l.*, commenced the purchases of the lands, and settled terms with some of the proprietors, but were soon afterwards under the necessity of suspending their proceedings in consequence of an intimation from those Commissioners that it would not be in their power to make a further advance.

This deficiency of funds rendered it necessary to apply again to Parliament, and in September 1848 a second Act was passed, whereby the Commissioners of Woods were authorised to grant to such parties as might be willing to accept them, certificates for securing the payment of their purchase monies, together with interest thereon, by means of which (assisted also by another advance of 10,000 *l.* from the Loan Commissioners) they were enabled to proceed slowly with acquiring the properties.

In August 1849, the Loan Commissioners made a further advance of 30,000 *l.*, and in February 1850, of 20,000 *l.*, making altogether, with the previous instalments, a total advance by them up to March 31st, 1850, of 100,000 *l.*, and the Commissioners of Woods at the like date had incurred expenses, and had purchased, or agreed to purchase, properties to the amount altogether of 82,659 *l.* 13 *s.* 1 *d.*

In October 1850 and January 1851, the Loan Commissioners made still further advances of 35,000 *l.* and of 15,000 *l.*, which, with the 100,000 *l.* previously received from them, made the total amount available for the formation of the park up to the 31st March 1851, 150,000 *l.*, and up to the like date the Commissioners of Woods had expended, or agreed to expend, the sum of 155,485 *l.* 16 *s.* 7 *d.*

The time for purchasing the properties, as limited by the Act of 1846, would have expired in August 1851, but as the funds available would not enable the Commissioners of Woods to complete within that period, it became necessary to apply again to Parliament, and on the 7th August 1851, a third Act was passed which extended the time to August 1853. This Act also repealed so much of the Act of 1848 as enabled the Commissioners to pay by certificates, and in consequence of the Board of Woods and Works being divided, the Commissioners of Works were for the purposes of this undertaking incorporated as "The Battersea Park Commissioners."

Within the two years, from 31st March 1851 to the 31st March 1853, 30,000 *l.* only was received from the Loan Commissioners; so that at the latter date the total

Battersea Park.

total sum advanced by them was only 180,000 *l.* At the like date the Battersea Park Commissioners (who had been obliged to pay off the certificates) had expended or agreed to expend the sum of 197,671 *l.* 15 *s.* 8 *d.*

The undertaking, which commenced in 1846, had now been seven years in hand; the engagements of the Commissioners nearly at all times exceeded the funds at their disposal. Within that period they had paid not less than 20,622 *l.* 6 *s.* 8 *d.* for interest, law expenses, ground rents, &c.; and as the properties to be purchased had, like all other lands in the neighbourhood of London, been rapidly increasing in value, the cost of the purchases agreed for up to this time had exceeded the architect's estimate by above 22,000 *l.*; although the compensations awarded were full 270,000 *l.* below the amounts claimed by the parties interested.

The Loan Commissioners had now only a further sum of 20,000 *l.* to advance, to complete the 200,000 *l.* which, by the Act of 1846, they were authorised to lend. This sum was not sufficient to complete the remaining purchases, and the compulsory powers of the third Act were about to expire within a few months; under these circumstances the Battersea Park Commissioners were compelled to apply again to Parliament, and it was arranged to grant them annual votes for the completion of the purchases, and for the laying out of the park, as follows; viz.

	£.
To be voted in the year 1853–4 - - -	32,641
,, ,, 1854–5 - - -	25,500
,, ,, 1855–6 - - -	25,500
,, ,, 1856–7 - - -	12,500
,, ,, 1857–8 - - -	12,500
£.	108,641

After August 1853, when the compulsory powers of the Act expired, very great difficulties were experienced in acquiring the outstanding properties; their value had, by the lapse of time, increased far beyond what it was in 1846, when the undertaking was commenced; and it was not possible to have recourse to juries, or to any arbitrators other than those chosen by the claimants. But, notwithstanding these difficulties, all were agreed for in 1854, except one, which was concluded in February 1855, and the final result of the purchase was as follows:

	£.	*s.*	*d.*
Total amount of claims - - - -	532.624	14	6
,, ,, purchases - - -	230,687	16	4
,, ,, Architect's estimate, made in March 1847 - -	187,433	15	11

Present State of the Roads and Park.

In February 1854, the purchases were so far completed that the Commissioners were then enabled to commence cutting down the hedges, filling the ditches, and clearing the gardens; they also gave all the tenants of the arable lands notice to quit at the following Michaelmas; and the works generally, which commenced about Michaelmas, have been continued from that period as rapidly as the funds have permitted, and as earth could be obtained for raising the levels.

Owing to the peculiarity of the site and the approaches to it from London, which will be principally by the river and by Chelsea Bridge, the works hitherto undertaken have consisted chiefly of raising the road of approach from Chelsea Bridge, and an esplanade by the river side the entire length of the park, preparatory to the construction of the embankment wall. But a great progress has also been made with the public roads outside the park, which are intended to give value to the building ground; thus, the Battersea Bridge Road has been continued into the Lower Wandsworth Road by a new road, 50 feet wide and 1,000 feet long. This road is now in general use, and is an accommodation to the public generally, and a very great improvement to the locality.

The road which forms the western boundary of the park, and extends from the river to the Lower Wandsworth Road (a length of three-quarters of a mile nearly)

Battersea Park.

nearly) has in parts been raised considerably, and is now formed from end to end; the footways on both sides and about half the roadway being completed.

The road along the south side of the park, which extends from Ponton's Mill at Nine Elms to the Battersea Bridge Road, is 60 feet wide, and nearly 1¼ miles long. The western portion of this road is completed, so as to afford access to the park from Battersea and Wandsworth; one footway is also completed the entire 1¼ mile; and workmen are now actively employed upon completing the formation of the whole carriageway, preparatory to its being gravelled.

The road which forms the eastern boundary of the park, and leads direct from Chelsea Bridge to the Lower Wandsworth Road, and forms also the principal approach to the park from London, is in a very advanced state; it is 60 feet wide, and half a mile long; more than two-thirds thereof being raised above the level of the surrounding land eight feet at the south end of the filling in, and 27 feet near the bridge.

The filling in of earth, together with the raising of an embankment to form the approach from the bridge to the park, has been a very great undertaking, and not less than 360,000 cubic yards of earth have been brought from the London Docks and other places and deposited here.

The total quantity of earth brought to the park, or moved by carts for the above-named great work, for the embankment in the park, for the esplanade, and for raising the other roads and drives, is calculated at not less than half a million cubic yards; exclusive of a very large quantity brought gratuitously by persons employed to clean the docks.

The filling up within the park for the drive from the bridge gate is completed, and that for the public road from the bridge, just referred to, will be completed within a few days. This public road has been formed throughout, except about a length of 300 feet near the bridge; the southern portion of this road, for a length of 1,800 feet, has also been gravelled, and within a very short period the whole road will be formed and gravelled all the way from the Lower Wandsworth Road to the bridge, ready for traffic.

The drive within the park from the Chelsea Bridge Road to near the Battersea Bridge Road, which is about three-quarters of a mile long, is very far advanced towards completion; for the greater part of this distance it passes near the river bank over the raised esplanade before mentioned; the footways on each side have been formed and gravelled, and are now constantly used by persons coming to the park; and the foundation of the roadway has been formed throughout its whole length ready for gravelling; but it is proposed to postpone the spreading of the gravel until the works around shall be more advanced.

Works remaining to be done.

The public roads outside the park which were before mentioned, and two or three other short roads, are expected to be completed in the course of the present year, so that the building ground may be brought into the market when the bridge shall be opened for traffic; but probably the ground will not be let rapidly, for some time will then elapse before all the newly acquired advantages of the locality become fully known; and much will depend upon the time of constructing the great sewer which has been proposed by the engineer of the Metropolitan Board of Works to pass along the south boundary road of the park before named, and without which there will not be any good and sufficient drainage for the houses and lands.

The works required within the park fence to lay it out as a park, according to the plan, and render it available as a place of recreation for the public, consist chiefly in the completion of the drive round it, the footpaths, the plantations, and the ornamental water; and also the building of the embankment wall of the river, which has always been considered an important part of the plan, and is in great part essential to protect the esplanade, which would otherwise require a considerable annual outlay to prevent the river from encroaching; by this embankment also a considerable area will be recovered from the river.

The expenditure upon the works up to the 31st of March last, including the great embankment for the bridge road, and the drive connected with it, has been 23,267 *l.*

23,267 *l.* 8 *s.* 10 *d.*, and the funds now applicable to works, including 25,000 *l.* remaining to be voted, are, I believe, near 30,000 *l.* Battersea Park.

The cost of remaining works inside and outside of the park fence will depend on what may be deemed essential, and upon the rate of carrying them forward, both of which subjects require great consideration, but the 30,000 *l.* will probably be sufficient, except for the river embankment, the cost of which has been estimated by the engineer at 25,000 *l.*

Excepting the river embankment, which is in the hands of the engineer, the works of the park are so far advanced that they may be completed within 18 months from the present time, if the walks and plantations are to be formed upon the present level of the ground; but if the walks are to be formed on a higher level, and mounds are to be raised for the plantations (both of which are very desirable), it will be necessary to curtail the annual outlay, and spread the work over some years.

The general level of the low lands varies from 6 to 3 feet below Trinity datum; the esplanade lately formed by the river side is 4 feet above that datum; the drive along the south side will be about the level of the datum, and the lowest parts of the east and west drives about 3 feet below it.

It would not be practicable to raise the level of the park generally, nor is it for any reason necessary to do so, for the effect of raising may be obtained by the formation of mounds, and by constructing the walks upon a level not in any place less than 2 feet below Trinity datum. And for the accomplishment of these objects two things are proposed as necessary,—first, the formation of about 16 acres of ornamental water, the excavation for which would assist the formation of the mounds; and secondly, the bringing in of ground and rubbish to raise the walks, partly by the river, and partly from the excavations for buildings round the park.

The completion of the park rapidly will perpetuate the present evils of the site; but by proceeding gradually those evils may be overcome, and the site be converted into one of the most picturesque and agreeable of the London parks. If the latter course should be adopted, it would be proposed to complete within the next 12 months the esplanade next the river, the drive round the park, and all the plantations between the drive and the boundary fence, with also two or three of the principal footpaths across the park, which works would in themselves entirely change the locality, and give very much of park-like appearance. The ornamental water also might with advantage be excavated within the present year.

There is yet one reason for the progressive formation of the park not yet alluded to, viz., the public sewer or open ditch, which now traverses the whole length of the south side, and cannot be filled up until the new main sewer has been constructed; unless, indeed, the authorities should consent to a temporary diversion of it, which, after the correspondence had with them on the subject, is scarcely to be expected. This open ditch is now a public nuisance, and will, so long as it continues, be a great drawback and hindrance to the enjoyment of the park.

The total quantity of land purchased for this undertaking was about 320 acres, and the total area, including the lands reclaimed and to be reclaimed from the river, about 346 acres; which, according to the plan now being acted upon, will be appropriated as follows:

	ACRES.	ACRES.
Within the Park Fence:		
Park Lands	185	
Villas	15	
		200
Outside the Park:		
Houses, Villas, and Wharfs	110	
Public Roads	36	
		146
		346

Battersea Park.

The total expediture up to the 31st March 1856 has been 281,068 *l.* 8 *s.* 6 *d.*, and the expenditure yet to be incurred, taken at 30,000 *l.* for the park and 25,000 *l.* for the embankment, will raise the outlay to 336,068 *l.* 8 *s.* 6 *d.*, of which sum 200,000 *l.* has been borrowed from the Exchequer Bill Loan Commissioners, upon the security of the 125 acres of building lands round the park. It would at present be premature to estimate what these lands may ultimately produce; but they are yearly increasing in value. The opening of Chelsea Bridge will bring them nearly within two miles of Charing Cross; the soil is a fine sandy gravel; and there is every reason to expect that the locality will become attractive.

(signed) *James Pennethorne.*

15 April 1856.

Nº 1.

MBANKMENT.

PAGE'S REPORT 21st APRIL, 1856.

Marquis of Westminster's property leased to Mr Cubitt,
sublet to the Chelsea Water Works Co.
Freehold of the Chelsea Water Co
Property of Mr Sloane Stanley
Property of the Marquis of Westminster leased to Mr Smith
Property of the Crown
Property of the Marquis of Westminster leased to Mr Cubitt
Cadogan Place
Cadogan Street
Pimlico Railway Station
Grosvenor Road
Chelsea Embankment
Battersea Park
Battersea Bridge
Battersea Park Road
Battersea Park Gate
Battersea Park Road
Battersea Park

THAMES EMBANKMENT,

PLAN OF FRONTAGE OCCUPIED BY Mr. CUBITT,

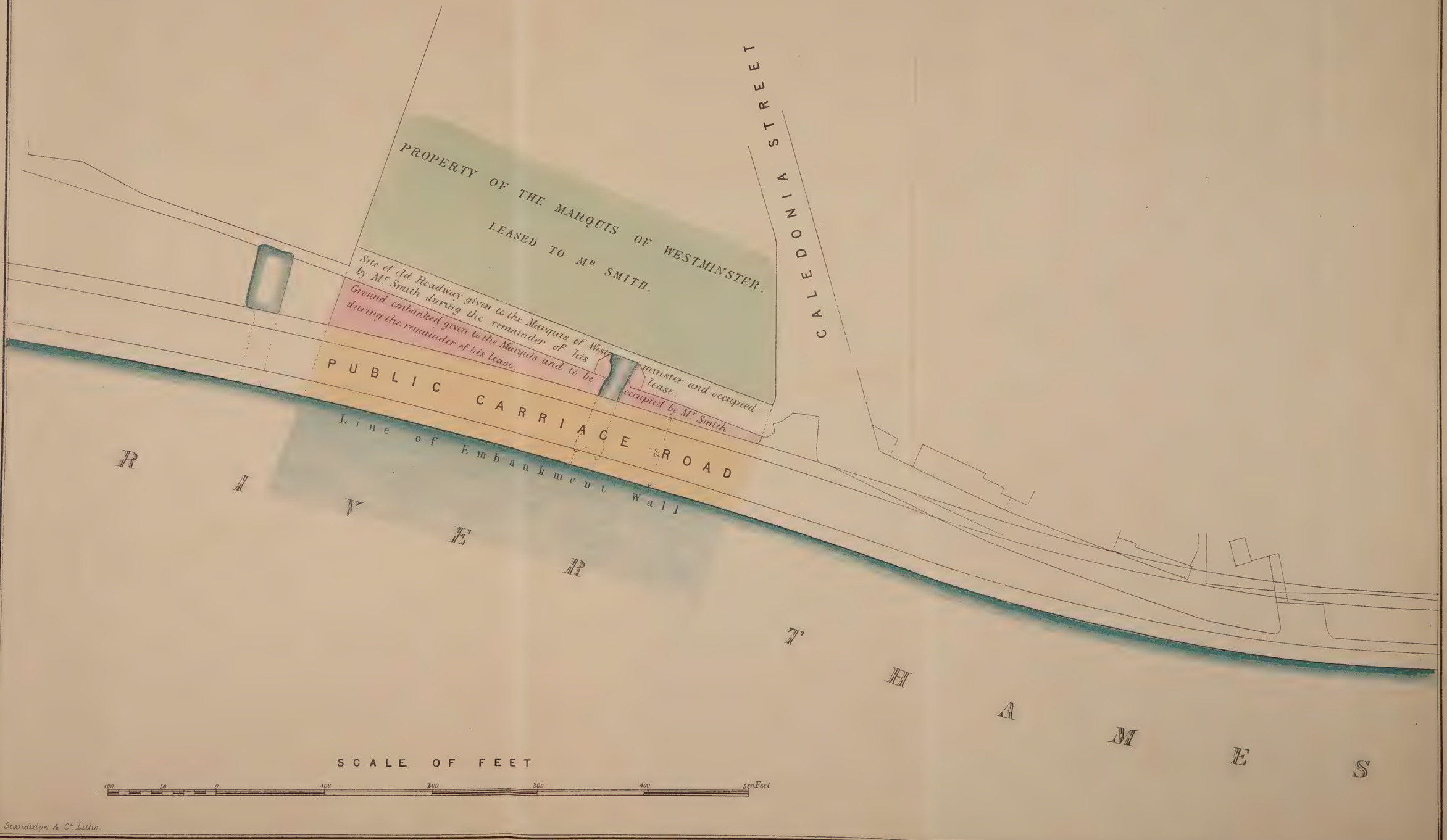
REFERRED TO IN Mr. PAGE'S REPORT 21st APRIL, 1856.

Standidge & Cº Lithº London.

Nº 193. Ordered, by The House of Commons, to be Printed, 2nd May, 1856.
Henry Hansard Printer.

THAMES EMBANKMENT.

PLAN REFERRED TO IN M^R PAGE'S REPORT OF 21^ST APRIL, 1856.


PROPERTY OF THE MARQUIS OF WESTMINSTER.
LEASED TO MR SMITH.
Site of old Roadway given to the Marquis of Westminster and occupied by Mr Smith during the remainder of his lease.
Ground embanked given to the Marquis and to be occupied by Mr Smith during the remainder of his lease.
CALEDONIA STREET
PUBLIC CARRIAGE ROAD
Line of Embankment Wall
RIVER THAMES
SCALE OF FEET
100 50 0 100 200 300 400 500 Feet

Standidge & Co Lithe.

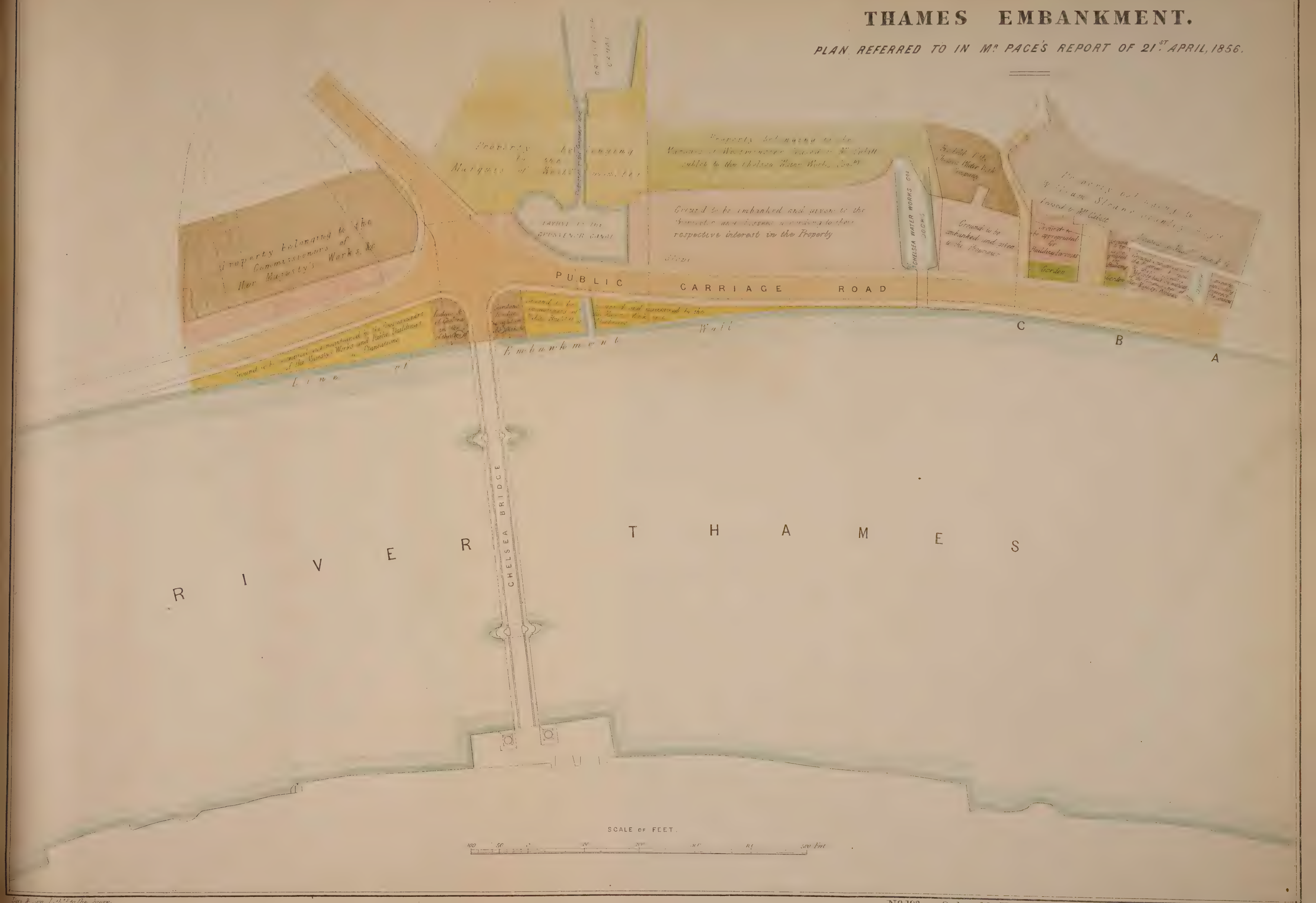
N° 193. Ordered, by The House of Commons, to be Printed, 2nd May, 1856.

Hansard Printer.

No 1.

THAMES EMBANKMENT.

PLAN REFERRED TO IN Mr PACE'S REPORT OF 21ST APRIL, 1856.


Property belonging to the Commissioners of Her Majesty's Works &c
Property belonging to the Marquis of Westminster
Property belonging to the Marquis of Westminster held on Lease subject to the Chelsea Water Works Co's
Ground to be embanked and given to the Proprietors and Lessees according to their respective interest in the Property
CHELSEA WATER WORKS Co's WORKS
Ground to be embanked and given to the Proprietors
Property belonging to the Trustees of Sir Hans Sloane deceased
Ground to be appropriated for Building Purposes
Garden
PUBLIC CARRIAGE ROAD
Wall
Embankment
Line of
Ground to be repaired and maintained by the Commissioners of Her Majesty's Works and Public Buildings as a Promenade
CHELSEA BRIDGE
RIVER THAMES
C
B
A
SCALE OF FEET.
100 50 0 200 300 400 500 Feet

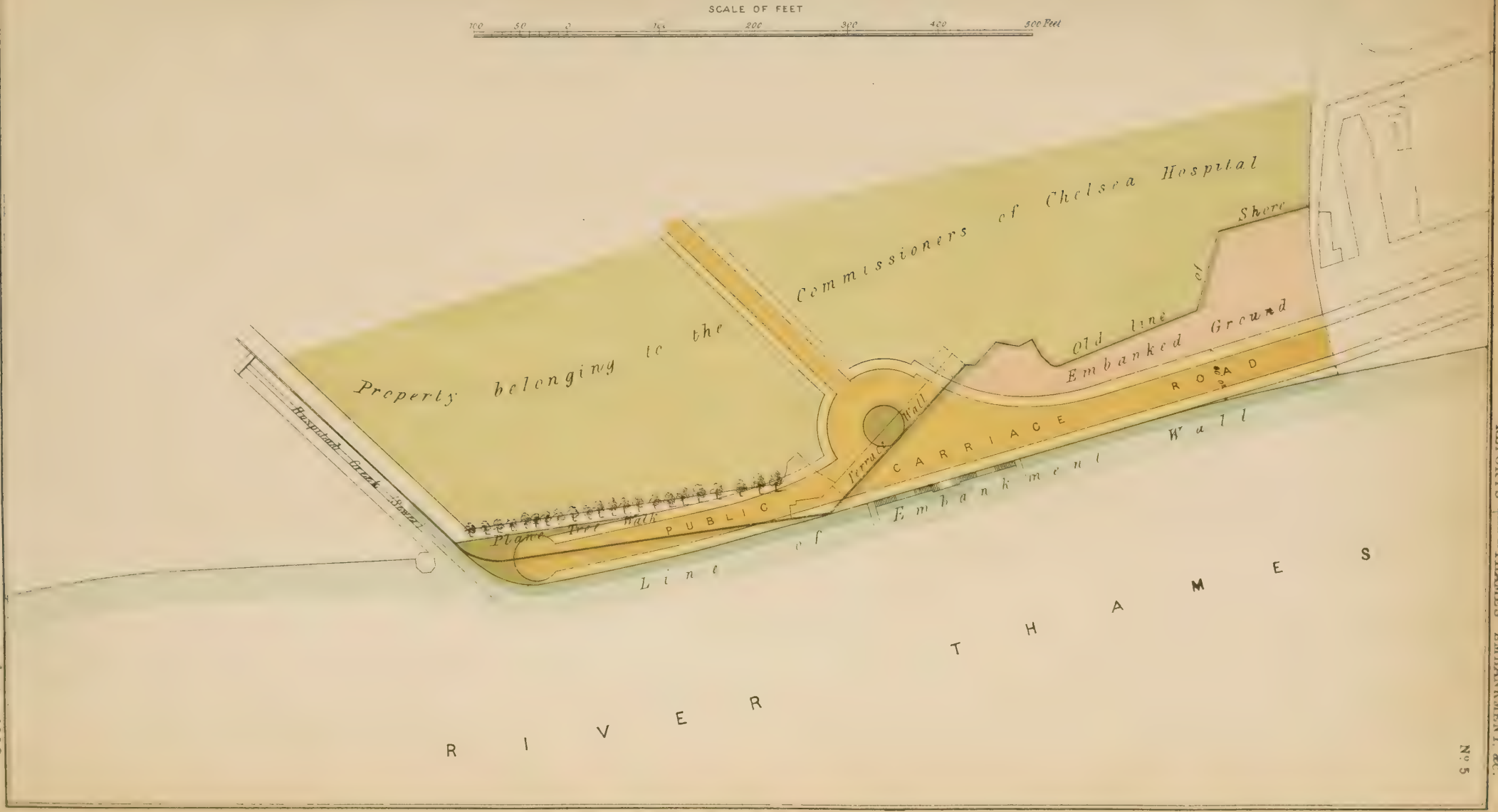
Day & Son Lith.rs to the Queen.

No 193. Ordered by The House of Commons, to be Printed, 2nd May, 1856.

Day & Haverd Printers

THAMES EMBANKMENT.

PLAN REFERRED TO IN Mr PAGE'S REPORT OF 21st APRIL 1856.



No 193. Ordered, by The House of Commons, to be Printed, 2nd May, 1856.
Henry Hansard Printer

THAMES EMBANKMENT, &c.

COPY of REPORTS on the Progress of Works in the THAMES EMBANKMENT, CHELSEA BRIDGE, the NEW STREET from *Lower Sloane Street* to *Chelsea Bridge*, and BATTERSEA PARK, presented to the First Commissioner of Her Majesty's Works, &c., by Mr. *Page*, Engineer, and Mr. *Pennethorne*, Architect.

(*Sir Benjamin Hall.*)

Ordered, by The House of Commons, *to be Printed*, 2 *May* 1856.

[*Price 2 s.*]

193.

Under 8 *oz.*

PIMLICO IMPROVEMENTS.

RETURN to an Order of the Honourable The House of Commons, dated 9 May 1856;—*for*,

COPY "of REPORT respecting PIMLICO IMPROVEMENTS, made to the First Commissioner of Her Majesty's Works, &c. by the Architect."

Sir, 7, Whitehall Yard, 12 March 1856.

I HAVE the honour to acknowledge Mr. Austin's letter of the 9th ultimo, conveying to me your instructions to reconsider my estimate of the 2d June last, of the expenditure required to complete the Pimlico Improvements, and to report such alterations (if any) as I may deem necessary therein; also to submit any observations or explanations I may consider desirable to be given in your proposed report to the Treasury.

It does not appear to me necessary to make any alterations in the statements and estimate of June last, except such as have arisen from the lapse of time; but, having your permission, I will re-state shortly the reasons (which have been given more at length in former reports), why larger funds are required for the first outlay upon this improvement than were at first contemplated, although the value of the properties in return will also be larger.

The 30th June 1852 the Commissioners of Works obtained an Act for this improvement upon the understanding that the outlay according to estimate would be 30,000*l.*, and that the value of the property to be returned to the Land Revenues (exclusive of the lands to be added to Buckingham Palace), would also be about 30,000 *l.*

The 4th August 1853 the Commissioners obtained a second Act, giving them the compulsory clauses, and also power to deviate from the line of street contemplated in 1852; and whilst the same was passing through Parliament (*i. e.* July 5th, 1853), an agreement was entered into between the then Chief Commissioner of Works and Mr. Gore (sanctioned by the Treasury), according to which the Land Revenues were to be compensated for the losses they might sustain by the improvement (allowance being first made for the land added to Buckingham Palace), and the value of their property at the commencement of the improvement was to be taken at 78,260 *l.*

The deviation from the plan of 1852 was considered by the Commissioners of Works desirable to render the public thoroughfare more direct, and to give more space around the Palace, and it was determined upon by them after they had made agreements with Mr. Elliott, which would have insured a sum of 38,000 *l.* from the sale of properties; but after they had obtained the Act and given notices under it to all the owners and occupiers to make their claims, Mr. Elliott failed to fulfil his agreements; they were consequently obliged to sell the properties by public auction; before they were put up a great depreciation in the value of property took place by reason of the war, and the sum realised was under 30,000 *l.* instead of 38,000 *l.*, as it would have been if Mr. Elliott had fulfilled his engagements.

In the meantime the claims from the owners and occupiers came in; the largest being for 40,000 *l.* from the Rev. J. P. Tomlinson, and others, the freeholders; the Commissioners thereupon applied to five of the most eminent surveyors in London, whose valuations, made independently of each other, ranged between 15,000 *l.* and 15,686 *l.*; a jury was accordingly summoned, and a verdict for 20,750 *l.* was given.

By the first of these cases above 8,000 *l.* was deducted from the expected assets, and by the second 5,000 *l.* was added to the outlay, so that the estimates were deranged to the extent of above 13,000 *l.*; the verdict of the jury is also considered to have given an increased value to the subordinate interests not yet purchased, and the amount now required to meet the outlay upon this improvement, as shown by the statement annexed, is estimated at not less than 26,862 *l.*

The Treasury, by their letter of the 17th May 1855, decided that under the agreement made between the late Chief Commissioner of Works and Mr. Gore, the building ground on the south side of the new street ought not to be sold (as had been proposed), and that as the Land Revenues are to be compensated out of funds to be provided by Parliament, it would be more proper to apply for a vote in the present state of the undertaking than after its completion; therefore as the improvement is now stopped for want of funds to meet the first outlay, and as (if it is to be continued) the purchases must be proceeded with this year (because the compulsory powers of the Act will cease in August 1857), it appears quite necessary that the subject should be submitted to Parliament during the present Session.

The sum required to be voted for completing the improvement would be, according to the statement annexed, 26,862 *l.* (say 27,000 *l.*), and it is possible that this amount does not differ very considerably from the amount which would have been required to be provided as compensation to the Land Revenues if the first line adopted had been persevered with; because, although the change of line has occasioned a larger first outlay than was intended, it will also afford larger returns; for the value of the property to be returned to the Land Revenues under this second line, if completed (as shown by the statement annexed to my report of the 2d June last), is estimated at not less than 45,632 *l.*, exclusive of the land at corner of Arabella-row, to be annexed to the Royal Mews, estimated as worth 6,000 *l.*, and of the land as now enlarged, annexed to Buckingham Palace.

Annexed to this Report are three plans. No. 1 shows the appropriation of the properties as they would have been under the Act of 1852; No. 2 shows the same as they will be if the improvement shall be completed according to the Act of 1853; and No. 3 shows the same as they will be if the improvement should not be proceeded with; and in addition to the observations hereinbefore made, I would only respectfully remind you, that although the estimates submitted have been made according to the best of my judgment and belief, the result of the undertaking, like all such improvements, must depend on many contingencies, and that the estimates in regard to the businesses, &c., to be purchased, are founded on very little data, for who can calculate the value of the goodwills without knowing the businesses done, or say what sums may have been expended by the lessees on their houses for businesses or enjoyments only, without adding to their value in the market? and who can foresee the changes which may take place in both businesses and houses before the time of purchase, especially if the undertaking be postponed for any lengthened period? And as respects the properties, I may add, who can estimate their cost (to say nothing of businesses, &c.), if, as in the case of the Rev. J. P. Tomlinson, a jury will award 25 per cent. more than the true value, according to the sworn opinions of the most eminent men in London?

I have, &c.

(signed) *James Pennethorne.*

The Right Hon.
The Chief Commissioner of Her Majesty's Works, &c.

PLAN

OF PROPERTIES

REFERRED TO BY THE

PIMLICO IMPROVEMENT BILL.

1852.

No 1.

BUCKINGHAM PALACE

Palace Gardens

STAFFORD ROW

Royal Stables

Riding House

Dwelling Houses

Lodge

VICTORIA ROAD

THE GUN TAVERN

Stafford Place

Princes Court

Bird Cage Walk

Arabella Row

Kings Row

Wallaces Yard

Princes Row

Little Charlotte Str.

Gt Charlotte Street

Stafford Place South

Catherine Place

Catherine Street

James Street

Buckingham Street

Palace Street

School

Brewer Street

Stationery Office

William Street

Isabella Row

Pine Apple Street

BLUE. . . *The Ground proposed to be annexed to Buckingham Palace.*

RED . . . *Building Ground* } *proposed to be retransferred*

YELLOW . *Houses on Lease* } *to the Land Revenue.*

PLAN

OF PROPERTIES

ACCORDING TO THE

PIMLICO IMPROVEMENT BILL.

1853.

No II.

BUCKINGHAM PALACE

Palace Gardens

STAFFORD ROW

VICTORIA ROAD

Royal Stables

Riding House

Dwelling House

Lodge

Kings Row

Arabella Row

Wallaces Yard

Princes Row

Brewer Street

Little Charlotte Str.

St Charlotte Street

THE GUN TAVERN

Stafford Place

Princes Court

Bird Cage Walk

Stafford Place South

Catherine Place

Catherine Street

James Street

Buckingham Street

Palace Street

Palace Street

School

Stationery Office

William Street

Pine Apple Row

BLUE. . . *The Ground proposed to be annexed to Buckingham Palace.*

RED . . . *Building Ground* } *proposed to be retransferred*

YELLOW . *Houses on Lease* } *to the Land Revenue.*

No III.

PLAN

OF PROPERTIES

PIMLICO IMPROVEMENT

IF LEFT AS AT PRESENT – MARCH, 1856.

BUCKINGHAM PALACE

Palace Gardens

Royal Stables

Riding House

Dwelling House

Lodge

Kings Row

Ambella Row

VICTORIA ROAD

THE GUN TAVERN

Stafford Place

Princes Court

Bird Cage Walk

Gt Charlotte Street

Little Charlotte Str.

Wallaces Yard

Princes Row

Brewer Street

Street

Stafford Place South

Catherine Place

Catherine Street

James Street

Buckingham Street

Palace Stred

School

Palace Street

William Street

Stationery Office

Isabella Row

Pine Apple Pl.

BLUE . . . *Ground annexed to Buckingham Palace.*

RED . . . *Building Ground* } *to be retransferred*

YELLOW . *Houses on Lease* } *to the Land Revenue.*

PIMLICO IMPROVEMENT.

ESTIMATE of LIABILITIES and ASSETS as they may be at Lady-day 1856.

LIABILITIES:	£.	s.	d.	ASSETS:	£.	s.	d.
Balance of Purchase-money due to the Rev. J. P. Tomlinson - -	5,750	–	–	Cash in hand 19th February -	1,554	19	6
Interest on 5,750 *l.* at 5 per cent. for quarter of a year - - -	71	17	6	Purchase-money due from Watney - - - - -	952	–	–
Purchase-money for Michael Howard	700	–	–	One and a half year's interest on 952½ *l.* - - - - -	71	8	–
The Chelsea Workworks Company for moving pipes, as awarded by Mr. Mylne - - - -	150	10	–	Estimate of Rent receivable at Lady-day 1856 - - -	300	–	–
Balances due to Mr. Chadwick for Road-making - - - -	371	–	–	Value of Properties recently sold	5,550	–	–
Day Bills due to Mr. Chadwick (say) - - - - -	100	–	–	Estimated net value of Old Materials of Houses, Arabella-row -	400	–	–
Account rendered by Architect for Professional Services to 31st December 1855 - - -	346	3	5		8,828	7	6
£.	7,489	10	11		7,489	10	11
				SURPLUS - - - £.	1,338	16	7

PIMLICO IMPROVEMENT.

ESTIMATE of the EXPENDITURE that would be required to complete the Improvement.

		Estimate
Purchases of Properties:		
Stafford-place, Nos. 30, 40, 41, 46, 47, 48, 49, 50, 51, 52, 53, and 54 - - - - - -	Messrs. Pinney.	
No. - - - - - (two houses) -	W. G. T. Barter.	
„ 32 - - - - - - - - -	Henry Busby.	
„ 31, 33, 34 - - - - - - - -	Henry Sugg.	
Stafford-row:		
No. 12 - - - - - - - - -	Thomas Bew.	
„ 13 (the Gun Tavern) - - - - -	William Rackstraw.	
„ 14 - - - - - - - - -	Edward Weatherly.	
„ „ - - - - - - - - -	G. H. Stevens.	
„ 15 - - - - - - - - -	James Booty.	
„ 16 - - - - - - - - -	Thomas Edy.	
„ 17 - - - - - - - - -	John Imrie.	
Claims £. 32,789 (say) - -		£. 23,200
Contingencies; viz., Road-making, Fences, Interest on Purchase-monies, Rates and Taxes, Expenses of Juries, and Arbitrations, &c. &c. - - - - -		5,000
		£. 28,200
Deduct Surplus available after payment of existing liabilities, as above -		1,338
		£. 26,862

PIMLICO IMPROVEMENTS.

COPY of REPORT respecting PIMLICO IMPROVEMENTS, to the First Commissioner of Her Majesty's Works, &c. by the Architect.

(Sir Benjamin Hall.)

Ordered, by The House of Commons, *to be Printed,*
9 *May* 1856.

[*Price* 1 *s.*]

193—I.

Under 4 *oz.*

SPITALFIELDS ROAD.

RETURN to an Order of the Honourable The House of Commons, dated 9 May 1856;—*for*,

COPY "of REPORT respecting the SPITALFIELDS EXTENSION LINE of METROPOLITAN IMPROVEMENTS, made to the First Commissioner of Her Majesty's Works, &c. by the Architect."

METROPOLIS IMPROVEMENTS.

NEW STREET from SPITALFIELDS CHURCH to SHOREDITCH.

GENERAL REPORT.

1846.—ON the 27th July 1846, an Act was passed to enable the Commissioners of Her Majesty's Woods, &c. to construct a new street from Spitalfields Church to Shoreditch; by this Act the proceeds (not exceeding in all 120,000*l.*) of a duty of 1*d.* per ton upon coals were applied to the purposes thereof, and the Commissioners were empowered to borrow money to the said amount on the security of the said duty, which then produced about 11,000*l.* per annum net.

On the same day an Act was passed to enable the Eastern Counties Railway Company (among other things) to enlarge their station at Shoreditch, and for that purpose to take the properties required to open into Shoreditch the north end of the above-named street. This Act was allowed to be passed after an agreement had been signed by the Solicitor of the Commissioners and the Solicitor of the Company respectively, to the effect that the Company should, at their own costs and charges, purchase the properties at the north end of the street, scheduled by them, and form and pave the portion of the new street over the same.

Shortly after the passing of these two Acts the Commissioners of Woods issued notices to the owners and occupiers of properties along the southern part of the line to make their claims, and the Railway Company did the like respecting the properties at the north end of the line to be purchased by them.

1849.—The Commissioners of Woods (as before stated) were authorised to borrow 120,000*l.* upon a duty estimated to produce 11,000*l.* per annum; but the security was considered so unsatisfactory that none of the large monied companies would grant the loan; little progress was therefore made with the purchases during the first two years. The sums actually received by the Commissioners from the duty up to the 31st March 1849, was 31,863*l.* 13*s.* 11*d.*, and on the same day the monies expended by them amounted to 30,541*l.* 15*s.* 4*d.*, exclusive of contracts entered into for further purchases to the amount of above 20,000*l.*

In the course, however, of the year 1849, the Commissioners of Woods succeeded in negotiating with the Bank of England for a loan (at four per cent. interest) of the sum of 87,919*l.* 7*s.*, being the difference between the sum of 120,000*l.* and 32,080*l.* 13*s.*, the net amount of the proceeds of that duty up to the time of contracting the loan.

1850.—The Bank of England almost immediately afterwards made an advance of 50,919*l.* 7*s.*, which made the total amount received by the Commissioners up to the 31st March 1850, applicable to the purposes of the Act, 82,783*l.* 0*s.* 11*d.*, out of which they had paid away for purchases alone 76,807*l.* 3*s.*, exclusive of other payments and of contracts entered into for further purchases.

About this period it became rumoured that the Railway Company had abandoned the intention of enlarging their station; that they had withdrawn their notices to the owners and occupiers of properties at the north end of the street (compensating them for their expenses); that they were disposed to consider the agreement entered into by their solicitor as not binding on them, and that they did not intend to act any further upon that agreement.

The Commissioners of Woods were therefore compelled to act accordingly, and applied again to Parliament for a second Act, which was passed on the 15th August 1850, extending the compulsory powers of the former Act to the 27th July 1853, and also appropriating to this improvement a further sum of 60,000*l.* out of the one penny duty on coals.

1851 and 1852.—All but two of the properties and interests required for the new street (except those at the north end which the Railway Company had undertaken to acquire) had been purchased or agreed for early in the year 1852.

In July 1851 a contract was entered into for the building of the sewer; at the same time another contract was entered into for building the vaults under the street, and in August a contract was made with the parish for paving the street; all three of these contracts extended as far northwards as Fleur-de-lis Court, being about 3-4ths of the whole length, and they were completed, and so much of the street was finished ready for traffic early in 1852.

In June 1852 the Commissioners of Works being satisfied that the Railway Company would not proceed to fulfil their engagements, and would contest the agreement, directed the architect to furnish them with an estimate of the cost of carrying the street through into Shoreditch, and in October they issued the notices required by the Standing Orders of Parliament, of intention to apply for an Act to enable them to complete the street; the improvement at this time had been for a considerable period entirely stopped.

1853.—On 4th August 1853, a third Act was passed to extend the time for the completion of the purchases of the north end to July 1856. During the progress of the Bill through Parliament the Railway Company appeared by counsel before the Committee; they contested the legality of the agreement which had been made on their behalf by their solicitor, and after considerable discussion a plan was arranged, signed by the Chairman of the Committee, and referred to in the Act, by which the Company were bound to give up for the street a small part of the fore court of their station in exchange for other ground, and the Commissioners of Works were to purchase all the properties and form the street through to Shoreditch.

Immediately after the passing of the third Act in August 1853, the owners and occupiers of the properties which the Commissioners of Works were thereby required and empowered to purchase, were called upon to send in their claims, and all the agreements for the purchases were concluded early in 1854, except only the Gordon Estate, from the trustees of which a claim was only obtained after great difficulty, and the agreement for arbitration with them was not made till November 1854.

Every house standing within the line of the new street, from one end to the other, had been pulled down in April 1855, except five, which stand upon the Gordon Estate fronting Shoreditch; the street has been formed up to the backs of these houses; but the sewer cannot be built, nor the street be paved and opened for public traffic until they have been removed.

Agreements have now been completed above 12 months since for the purchase of all the properties required for this improvement, at a cost of 170,327*l.* 7*s.* 10*d.*, the architect's estimate of the same having been 163,707*l.* 0*s.* 5*d.*; and all the properties have been paid for except three agreed for at about 21,000*l.*, including the Gordon Estate, for which it is understood a title has not been made.

The improvement is now entirely at a stand for want of ready money; the sum now required to complete the undertaking is about 27,000*l.* (or about 22,000*l.*, after deducting cash in hand); to meet this deficiency the Commissioners of Works

Works are empowered to sell or mortgage the building-ground on each side of the street, estimated to be eventually worth 80,000*l.*

In October 1855, after the subject had been some months discussed, the architect represented the inexpediency of selling any of this ground before the street should be opened as a public thoroughfare; he suggested the propriety of borrowing 20,000*l.* upon mortgage.

(signed) *James Pennethorne.*

SPITALFIELDS ROAD.

COPY of REPORT respecting the SPITALFIELDS EXTENSION LINE of METROPOLITAN IMPROVEMENTS, made to the First Commissioner of Her Majesty's Works, &c. by the Architect.

(*Sir Benjamin Hall.*)

Ordered, by The House of Commons, *to be Printed,*
9 *May* 1856.

193—II.

Under 1 *oz.*

FOREST OF DEAN CENTRAL RAILWAY ADVANCE.

RETURN to an Order of the Honourable The House of Commons, dated 9 June 1856;—*for*,

COPY "of the CORRESPONDENCE between the Office of Woods, &c., and the Treasury, relative to an Advance on Loan out of the Land Revenues of the Crown to the Forest of Dean Central Railway Company."

Treasury Chambers, 9 June 1856. JAMES WILSON.

My Lords, Office of Woods, 31 March 1856.

IN September last I received a copy of the Resolutions of a General Assembly of the Coleford, Monmouth, Usk and Pontypool Railway Company, held on the 30th August last, from which it appears that the proposed extension of their Line from Coleford, through the Forest of Dean, to the South Wales Railway at Hagloe, is indefinitely postponed, and the central portion of the forest thereby rendered destitute of railway communication.

In the month of December following a deputation waited upon me, consisting of several of the largest and most influential coal owners in the central part of the forest, who, upon the final abandonment of the extension of their line by the above-named Company, proposed to form a line of railway from the South Wales Railway and River Severn, at or near Brimspill, passing through Howbeach Glade and Blakeney Valley, and through the central district of the forest to Foxe's Bridge.

Plans and sections of such a line of railway have been lodged, and the deposit required by the Standing Orders has, I understand, been paid into the Bank of England.

The estimated expense of constructing the line, no tunnel or heavy works being necessary, is 60,000 *l.*, and the annual traffic is estimated by the Promoters at—

	£.	£.
200,000 tons of coal at 1 *s.* - - - -		10,000
50,000 tons of other produce at 6 *d.* - -		1,250
		11,250
Deduct 50 per Cent. for working, repairs, &c. -		5,625
	£.	5,625

leaving more than nine per Cent. upon the capital required, 60,000 *l.*

Shares have already been taken to the amount of 48,750 *l.*, as appears by the copy of the subscription contract, a print of which, as received by me from the agents of the Bill, is herewith transmitted; but in order to make up the sum required, the Promoters of the railway have proposed to me that the Crown should grant a loan of 20,000 *l.* towards the formation of the line, and four of the principal parties interested therein, viz., Dr. Wagstaff, Dr. Teague, Mr. Timothy Bennett, and Mr. Teague of Hagloe, all of them coal proprietors, and, I understand, responsible persons, will guarantee five per Cent. interest on the several instalments of the loan from the times when such instalments shall be made until the completion of the line, but at the same time they desire, on behalf of themselves and the other promoters, to have power to pay off such loan by instalments.

I venture to lay this proposal before your Lordships, and I will proceed to state my reasons for recommending it to your favourable consideration.

The Hagloe estate was purchased by the Crown in 1852, with the view, in a great measure, of facilitating the formation of such a line of railroad as that now proposed.

Brimspill, situate on the estate, is considered the most eligible site upon the Severn, between Chepstow and Gloucester, for a shipping port, and this opinion is borne out by the published surveys of Admiral Beechey, the Admiralty Surveyor; and looking at the amount of forest produce, such as coal, iron ore, timber, building stone, &c., which would be shipped from Brimspill, there is every probability of its becoming a port of considerable importance.

Your Lordships will perceive from the accompanying plan, that the proposed line, which is 7 miles 5 furlongs in length, runs entirely through Crown property, with the exception of three-quarters of a mile near Blakeney.

It commences at a place called Foxe's Bridge, in the centre of the forest, and runs through a district, the area of minerals within which is computed by Mr. Atkinson, the deputy gaveller, at upwards of 5,000 acres, containing about 50,000,000 tons, and would supply a traffic in coal alone of upwards of 300,000 tons annually, for 150 years.

In addition to the foregoing reasons for the necessity of railway communication through this portion of the forest, I beg to state that there are many of the coal proprietors who have gales in the district, and who have been unable hitherto to open them for want of proper means of transit. Many of these coal owners are in arrear for dead rents, and when I have applied to them on the subject, they always allege as an excuse for non-payment that they are unable to work their collieries, because they have no means of transporting the produce to market, and as the Crown has never given them any assistance towards obtaining proper railway communication for this part of the forest, they consider it a great hardship to be called upon to pay up heavy arrears of dead rent.

In the district which will be affected by the proposed railway, there are situated 36 gales of coal, out of which there are only four at present in work, and the arrears of dead rent due at Christmas last from the gales in this district amounted to 5,414 *l.*

There can be no doubt that the want of railway communication in the portion of Dean Forest through which this line will pass, has proved very detrimental to the beneficial development of the mineral property of the Crown in that district, and has consequently prevented the receipt of a larger revenue therefrom.

This line, if formed, would at once open an easy means of transit for all produce from the centre of the forest to Brimspill, and being also in junction with the South Wales Railway, would afford every facility of transit for coal, iron, timber, bark and stone, along that line also.

The promoters further state that the line will be so laid out that in the event of the Monmouth, Usk, and Pontypool Railway being extended eastward from Coleford at some future time, the traffic of that line also would be thrown into it, and a direct communication east and west established through the forest.

This undoubtedly would be a great advantage to the forest, but the line which it is now proposed to make from Foxe's Bridge to Brimspill on the Severn, and forming a junction with the South Wales Railway, is the one which is more immediately required, and from which the greatest benefit will be derived, not only to the owners of mineral property in the district, but also to the Crown.

After various interviews and consultations with the solicitor of this department, and the promoters of the Railway, it has been proposed that the following arrangements should be carried out by clauses in the Bill, viz:

1st. To authorise advances to be made out of the income of the land revenues of the Crown of sums not exceeding in the whole 20,000 *l.*, for the purpose of making this Railway; this clause to be justified by a resolution of the House of Commons, and an instruction to the Committee on the Bill.

2d. The security for these advances to be a bond to the Queen of four subscribers (men of substance) for the repayment of the sum advanced, with interest.

3d. The money to be advanced in instalments of not less than 3,333 *l.* 6 *s.* 8 *d.* each, and the first instalment to be advanced when an engineer to be approved of by your Lordships shall certify that an amount of work shall have been done on the Railway and Works, and an amount of materials for the same delivered

delivered on the ground taken for the Railway; the whole to the value of 10,000 *l.*, and subsequent instalments on like conditions.

4th. The Railway and Works and all materials thereon to vest in the Crown absolutely, as a further security for the advances from time to time to be made, with interest at 5 per cent. thereon, from the date of the advances, in the same manner as if a mortgage had been made thereof on each advance, with power of sale in default of payment, and the advances had respectively been made payable at the expiration of 12 months from the time of their having been made. The money advanced with interest thereon to have priority over all other debts of the Company.

5th. The bond of the four subscribers to become void on the completion of the Railway and its opening for traffic within the period to be limited by the Act.

6th. The agreement as to the land is, that, if the Act passes, the Railway Company shall have a lease of such part of the Forest of Dean as is necessary for the purposes of the Railway, such land being previously defined by a plan; such lease to be for a term of 999 years at a peppercorn rent for the first two years from the passing of the Act, and afterwards at a rent of 100 *l.* per annum. The timber and wood on the site being severed by the Company and left for the Crown to sell, or paid for by the Railway Company at a valuation to be made by two persons; one to be named by either party, or by the umpire of such two persons to be appointed by them before they proceed to business.

Under these circumstances I beg to submit for your Lordships' favourable consideration the propriety of granting a loan of 20,000 *l.* on the terms above suggested in aid of the undertaking, 5 per cent. per annum being guaranteed thereon by responsible persons until the line is opened, and on the distinct understanding, if an Act be granted, that the line be commenced and carried out with the least possible delay.

I have, &c.
(signed) *James Howard.*

The Lords Commissioners of
Her Majesty's Treasury,
&c. &c. &c.

Copy of Treasury Minute, on the foregoing Report, dated the 9th May 1856.

Write to Mr. Howard that my Lords approve of the arrangement proposed in this Report.

My Lords, Office of Woods, 31 May 1856.

Adverting to your Lordships' letter of the 9th instant, authorising a loan of 20,000 *l.* to the Forest of Dean Central Railway Company, upon certain specified conditions and arrangements, as recommended in my Report of the 31st March last, I beg leave to inform your Lordships that the Forest of Dean Central Railway Bill passed the Committee of the House of Commons, and was reported on the 27th instant, and no further progress can be made with the Bill until a resolution is moved in the House of Commons, justifying the advance out of the income of the land revenues of the Crown, on the terms sanctioned by your Lordships, of sums not exceeding in the whole 20,000 *l.*, and instructing the Committee on the Bill to insert the necessary clauses for that purpose.

The proposed clauses have been prepared by Messrs. Fearon and Clabon, the solicitors to the projected Company, and have been revised and settled by Mr. Ker, and I have therefore to request that your Lordships will be pleased to make the necessary arrangements for moving the resolution with the least possible delay, in order that no time may be lost in proceeding with the Bill.

I have, &c.
(signed) *James Howard.*

The Right Honourable
The Lords Commissioners of
Her Majesty's Treasury.

FOREST OF DEAN CENTRAL RAILWAY ADVANCE.

COPY of the CORRESPONDENCE between the Office of Woods, &c. and the Treasury, relative to an Advance on Loan out of the Land Revenues of the Crown to the Forest of Dean Central Railway Company.

(*Mr. Wilson.*)

Ordered, by The House of Commons, *to be Printed,*
9 *June* 1856.

Under 1 *oz.*

HAMPTON COURT AND KEW GARDENS.

RETURN to an Address of the Honourable The House of Commons, dated 10 July 1856;—*for*,

A "RETURN of the NUMBER of VISITORS admitted to see the APARTMENTS and PICTURES at HAMPTON COURT, and the GARDENS at KEW, during the Year 1855; distinguishing the Number in each Month, and the Number on the several Sundays (in continuation of Parliamentary Paper, No. 198, of Session 1855)."

(*Sir George Brooke Pechell.*)

Ordered, by The House of Commons, *to be Printed*,
25 *July* 1856.

RETURN of the Number of Visitors admitted to see the Apartments and Pictures at Hampton Court, and the Gardens at Kew, during the Year 1855; distinguishing the Number in each Month, and the Number on the several Sundays (in continuation of Parliamentary Paper, No. 198, of Session 1855).

HAMPTON COURT PALACE.

	Sundays.		Other Days.	Totals.
7 January	148			
14 „	169			
21 „	52			
28 „	71			
		440	902	1,342
4 February	29			
11 „	68			
18 „	57			
25 „	40			
		194	409	603
4 March	209			
11 „	66			
18 „	164			
25 „	214			
		653	1,372	2,025
1 April	404			
8 „	738			
15 „	752			
22 „	1,048			
29 „	798			
		3,740	3,941	7,681
6 May	794			
13 „	229			
20 „	1,077			
27 „	3,080			
		5,180	11,033	16,213
3 June	2,038			
10 „	2,680			
17 „	1,638			
24 „	2,628			
		8,984	14,681	23,665
1 July	2,343			
8 „	2,270			
15 „	2,281			
22 „	2,242			
29 „	1,677			
		10,813	19,373	30,186
5 August	2,056			
12 „	1,870			
19 „	2,499			
26 „	2,486			
		8,911	22,508	31,419
2 September	2,414			
9 „	2,076			
16 „	1,332			
23 „	1,425			
30 „	642			
		7,919	11,491	19,410
7 October	462			
14 „	475			
21 „	342			
28 „	388			
		1,667	3,874	5,541
4 November	187			
11 „	241			
18 „	132			
25 „	124			
		684	981	1,665
2 December	125			
9 „	104			
16 „	175			
23 „	70			
30 „	121			
		595	1,075	1,670
		49,780	91,640	141,420

K E W.

	Sundays.		Other Days.	Totals.
7 January	106			
14 „	104			
21 „	17			
28 „	55			
		282	587	869
4 February	9			
11 „	55			
18 „	28			
25 „	40			
		132	322	454
4 March	147			
11 „	25			
18 „	164			
25 „	224			
		560	2,385	2,945
1 April	346			
8 „	684			
15 „	754			
22 „	968			
29 „	746			
		3,498	7,193	10,691
6 May	1,123			
13 „	78			
20 „	3,765			
27 „	7,236			
		12,202	11,334	23,536
3 June	8,362			
10 „	9,816			
17 „	5,496			
24 „	10,240			
		33,914	25,949	59,863
1 July	8,902			
8 „	9,929			
15 „	10,580			
22 „	9,852			
29 „	10,058			
		49,321	27,290	76,611
5 August	10,396			
12 „	10,221			
19 „	10,708			
26 „	11,998			
		43,323	32,563	75,886
2 September	8,844			
9 „	9,901			
16 „	5,353			
23 „	7,435			
30 „	529			
		32,062	22,062	54,124
7 October	729			
14 „	412			
21 „	275			
28 „	364			
		1,780	3,994	5,774
4 November	198			
11 „	224			
18 „	124			
25 „	64			
		610	1,269	1,879
2 December	65			
9 „	111			
16 „	173			
23 „	57			
30 „	104			
		510	674	1,184
		178,194	135,622	313,816

Office of Her Majesty's Works and Public Buildings, 23 July 1856.

Alfred Austin, Secretary.

HAMPTON COURT AND KEW GARDENS.

RETURN of the Number of Visitors admitted to see the Apartments and Pictures at Hampton Court, and the Gardens at Kew, during the Year 1855; distinguishing the Number in each Month, and the Number on the several Sundays (in continuation of Parliamentary Paper, No. 198, of Session 1855).

(*Sir George Brooke Pechell.*)

Ordered, by The House of Commons, *to be Printed,*
25 *July* 1856.

Under 1 *oz.*

HYDE PARK.

RETURN to an Order of the Honourable The House of Commons, dated 30 May 1856;—*for*,

A RETURN, "showing to what Purposes the HOUSE, GROUNDS, and MEADOW LAND situated between the Soldiers' Quarters, in the Middle of *Hyde Park*, and the Receiving House of the Royal Humane Society, near the *Serpentine*, are now given up; what RENT (if any) is received for them; by whom and to whom it is paid; and the PERIOD at which the OCCUPANCY will expire."

THE House, Grounds, and Meadow Land situated between the Soldiers' Quarters, in the middle of Hyde Park, and the Receiving House of the Royal Humane Society, near the Serpentine, are given up to the use of the Superintendent or Deputy Ranger of the Parks, who is appointed by His Royal Highness the Ranger, and have been occupied by such Superintendent or Deputy Ranger and his family since his appointment in 1832. There is no rent paid or received, the occupation being considered as an official residence, and the premises are held as all other lodges in the Royal Parks which may be so occupied.

Henry Frederick Stephenson,
Deputy Ranger.

4 June 1856.

HYDE PARK.

RETURN showing to what Purposes the House, Grounds, and Meadow Land situated between the Soldiers' Quarters, in the Middle of *Hyde Park*, and the Receiving House of the Royal Humane Society, near the *Serpentine*, are now given up, &c.

(*Mr. William Ewart.*)

Ordered, by The House of Commons, *to be Printed,*
3 *July* 1856.

MILITARY BANDS ON SUNDAYS

RETURN to an Address of the Honourable The House of Commons dated 9 May 1856;—*for*,

A "RETURN of the Number of MEMORIALS, with the Total Number of SIGNATURES attached thereto, praying for the Discontinuance of the Performance of MILITARY BANDS on SUNDAYS, which have been forwarded through the Home Office, stating the PLACES from which such Memorials have been sent."

Whitehall,
12 June 1856.

H. WADDINGTON.

RETURN of the Number of MEMORIALS, with the Total Number of SIGNATURES attached thereto, praying for the Discontinuance of the Performance of MILITARY BANDS on SUNDAYS, which have been forwarded through the Home Office, stating the PLACES from which such Memorials have been sent.

THE memorialists generally express loyalty and attachment to Her Majesty's person and Government; set forth the obligations which in their opinion exist for the due religious observance of the Lord's Day, and the evils likely to arise from an opposite course, tending to throw temptations and obstacles in the way of those who might be disposed to attend Divine worship in the afternoon and evening of that day; and they pray that the public performance of MILITARY BANDS in the Parks may be discontinued, and that no other measures be adopted having a tendency to secularise the Lord's Day.

The memorials marked "C" also object to the opening of KEW GARDENS on the Lord's Day.

The memorials marked "D" also pray Her Majesty to withhold Her sanction from the opening of the BRITISH MUSEUM, NATIONAL GALLERY, CRYSTAL PALACE, AND OTHER EXHIBITIONS on the Lord's Day.

The memorials marked "G," also pray Her Majesty to withhold Her sanction from the opening of the BRITISH MUSEUM AND OTHER EXHIBITIONS on the Lord's Day, and also to put a stop to the assemblage of the higher classes in their EQUIPAGES IN THE PARKS on that day.

The memorials marked "D*" also pray Her Majesty to withhold Her sanction from the opening of the BRITISH MUSEUM AND OTHER EXHIBITIONS on the Lord's Day, and also to put a stop to RAILWAY AND OTHER TRAVELLING, and all similar employments, on that day.

The memorials marked "M," also call attention to sundry desecrations of the Lord's Day, viz., SUNDAY JOURNALS, THE OPENING OF SHOPS AND PUBLIC-HOUSES, THE PLYING OF BOATS AND VESSELS ON CANALS AND RIVERS, THE RUNNING OF RAILWAY TRAINS, THE TRANSMISSION OF THE MAILS, AND THE DELIVERY OF LETTERS, AND PRAY Her Majesty to put a stop to the assemblage of the higher classes in their EQUIPAGES IN THE PARKS on that day, and to prevent the opening of the BRITISH MUSEUM, NATIONAL GALLERY, CRYSTAL PALACE, AND OTHER EXHIBITIONS, and to adopt other measures for the due observance of the Lord's Day.

The memorials marked (F. L.) also pray Her Majesty to prohibit all PUBLIC AMUSEMENT AND SALE OF REFRESHMENTS on the Lord's Day in the Royal Parks.

The memorial marked "N," also prays that the influence of AMBASSADORS, PLENIPOTENTIARIES, AND OTHER REPRESENTATIVES ABROAD MAY be exerted for the PRESERVATION OF THE SABBATH, and that other measures may be adopted for that purpose.

GENERAL SUMMARY.

	TOTAL.	
	MEMORIALS.	SIGNATURES.
MILITARY BANDS.—*Against public performance* on the Lord's day - - - - - - GRAND TOTAL - - -	542	111,309

SUB-DIVISION.

SUMMARY of the Contents of certain of the Memorials which contain, in addition to the general Prayer against Military Bands, other Prayers, as follows :—

	MEMORIALS.	SIGNATURES.
Ambassadors, &c. for using influence for Lord's Day observance	1	46
British Museum, National Gallery, Crystal Palace, &c.—against opening	76	24,910
Equipages in the Parks, &c.—for prohibiting	31	3,413
Garrison Bands—for prohibiting	1	1
Kew Gardens—against opening	34	9,638
Public Amusements—for prohibiting	2	236
Railways—against railway travelling	6	380
Sale of Refreshments—against	2	236
Sunday Journals, Shops, Public-houses, Canal Boats, Railway Trains, Mails, Carriages in the Parks, &c.—for prohibiting	2	328

ANALYSIS of the MEMORIALS for Discontinuance of the Public Performance of Military Bands on the Lord's Day.

	MEMORIALS.
Free Church (General Assembly)	1
Ditto Members of the Free Church	8
Ditto Presbyteries	4
Ditto Kirk Sessions	1
Ditto Synods	1
Church of Scotland (Kirk Sessions)	3
Presbyterians	2
United Presbyterians	5
United Seceders	1
Public Meetings	7
Associations	2
Clergy	2
Clergy and others	28
Wesleyans	98
Independents	9
Baptists	11
Congregationists	4
Primitive Methodists	1
Nonconformists	1
Calvinists	2
Protestant Dissenters	7
Dissenters (Countess of Huntingdon)	1
Sunday School Teachers	7
Female Inhabitants of various places	26
Miscellaneous (Inhabitants of various places, &c.)	311

MILITARY BANDS.—Against Public Performance on the Lord's Day, &c.

	Signatures.
Incolarum Vici Dalhamensis in Icenorum Regione	15
Rev. Richard Snape and others, of Brent Eleigh, county of Suffolk	19
Members of the congregation of Wesleyan Methodists at Market Rasen, in the county of Lincoln	71
Wesleyans, Bridlington Quay, Yorkshire	162
Members of the church and congregation assembling in the Independent Chapel, Hingham, Norfolk	57
Members of the society and congregation worshipping in the Wesleyan Chapel, Hippings, near Accrington, Lancashire	85
Members of the congregation assembling in the Wesleyan Chapel, Methwold, in the county of Norfolk	91
Minister, officers, and congregation meeting in the Congregational Church, Middleton-road, Dalston, in the county of Middlesex	347

Inhabitants

	Signatures.
Inhabitants of Ridbourne, Lincolnshire	65
Thereundersigned Edward Blackshaw and others	70
Members of a congregation of Wesleyan Methodists worshipping in Haslingden	97
Inhabitants of Layer Breton, in the county of Essex	50
Inhabitants of Addingham, in the county of York	134
Clergy and inhabitants of the parish of St. Breock, in the county of Cornwall	70
Minister, churchwarden, and other inhabitants of the new parish of Trawden, in the county of Lancaster	24
Wesleyan Methodists of the township of Oldbury, in the county of Worcester	258
Members of the congregation worshipping in the Wesleyan Chapel, Salcombe, Devon	38
Inhabitants of Whalley and Wiswell, in the county of Lancashire	71
The undersigned Henry Brakenbury and others, of Scremby, Spilsby, Lincolnshire	99
Members of the congregation of Baptists at Hemel Hempstead	88
Inhabitants of the north and east of London	276
Wesleyans of Richmond, Yorkshire	192
Members of the Baptist Congregation at Landbeach, Cambridgeshire	30
Wesleyan Methodists of Bridlington, Yorkshire	49
Inhabitants of the Isle of Man	136
Inhabitants of Churston Ferrers, in the county of Devon	59
Inhabitants of Ilfracombe, in the county of Devon	116
Members of the Wesleyan Methodists worshipping at Bingley, Wilsden, and Cullingworth, in the county of York	294
Members of the Wesleyan Congregation, Accrington	104
Members of the church and congregation meeting in the Baptist Chapel, Wykenfowe	76
Inhabitants of the parish of Gamlingay, in the county of Cambridge	55
Members of the Wesleyan Methodist Congregation at Padfield, in the parish of Glossop, in the county of Derby	50
Inhabitants of the district of St. James's, Pentonville, parish of Clerkenwell	597
Inhabitants of the parish of Orton Longueville, with Botolph's Bridge, in the county of Huntingdon	40
Inhabitants of the chapelry of Muker, in the parish of Grinton, and county of York	285
Members of the congregation of Protestant Dissenters meeting in the Baptist Chapel	49
Members of the Wesleyan Methodist Congregation worshipping in the parish of Glossop, in the county of Derby	87
Members and worshippers in the Wesleyan Chapel, Towcester, in the county of Northampton	52
Minister and members of the Independent Church and Congregation assembling at Eldad Chapel, in the Island of Guernsey	216
Minister, churchwardens, and others, the parishioners of the parish of Woodside, in the county of York	46
Inhabitants of Watton	82
Inhabitants of the parishes of Marros and Kiffig, in the county of Carmarthen	84
Inhabitants of Rodmersham, near Sittingbourne, in the county of Kent	26
Members of the congregation worshipping at Portland-street Chapel, Bristol	156
Inhabitants of the parish of Willesden, in the county of Middlesex	94
Vicar, curate, churchwardens, and inhabitants of the parish of Netheraven, in the county of Wilts	37
Inhabitants of the district of Christ Church, Highbury	156
Inhabitants of Slaidburn, in the West Riding of York	58
Inhabitants of Brewood, Staffordshire	147
Ministers, wardens, and congregation of Stockwell Episcopal Chapel, Lambeth, Surrey	223
Inhabitants of Eye, in the county of Northampton	116
Parishioners of Clongish, county of Longford, Ireland	60
Inhabitants of Edmonton	151
Ministers and members of the congregation worshipping in the Wesleyan Methodist Chapel, Great Yarmouth	99
Protestant Dissenters of the Independent Denomination assembling at the Tabernacle Chapel, Newport, Monmouthshire	98
Teachers in Sunday and day-schools in various parishes in the Metropolis	300
Inhabitants of the borough of Pontefract	480
Inhabitants of Pontypool	160
Members and adherents of the Congregational Church, Stane Shotts Ironworks, Scotland	80
Inhabitants of the parish of Monk Herilden, in the county of Durham	2
Inhabitants of the borough of Stamford	144
Members of the congregation worshipping at Mansion House Chapel, High-street, Camberwell	86
Members of the Wesleyan Methodist Congregation, Horncastle, in the county of Lincoln	147
Inhabitants of Nantyglo, Monmouthshire	45
Inhabitants of Castle Hedingham	68

	Signatures.
Members of the Baptist Congregation at Fornsett St. Peter's, in the county of Norfolk	77
Inhabitants of Foxford, Ireland	81
Members of the congregation worshipping at Old Market-street Chapel, Bristol	74
Female inhabitants of the parish of Midsomer Norton, in the county of Somerset	258
Inhabitants of Coate's Chapelry, in Whittlesea, Cambridgeshire	91
Members of the united congregations of the Wesleyans, Congregationalists, and Primitive Methodists worshipping in the town of Stokesley, Yorkshire	212
Members of the congregation of Protestant Dissenters worshipping in the Baptist Chapel at Wakefield, in the West Riding of the county of York, and unanimously agreed to at a meeting held on the 10th day of February 1856. Signed on behalf of the said congregation, A. Perry, M. D., Pastor, Thos. Hollgson, Thos. James Jackson, Deacons	3
Members of the society and congregation of Wesleyan Methodists worshipping in East-street Chapel, Southampton	145
Inhabitants of St. Thomas's district, Eccleston, near St. Helen's, in the county of Lancaster	561
Parishioners of Castle Donington, in the county of Leicester	292
Thereundersigned Henry Rolfe and others	117
Members of the congregation and residents in the district of Christ Chapel, Maida Hill, in the county of Middlesex	702
Inhabitants of Kilbride, Isle of Arran	221
Members of the congregation of Wesleyan Methodists worshipping in Tower-street Chapel, King's Lynn, Norfolk	128
Thereundersigned John Bowman and others	148
Inhabitants of the parish of Stourton, in the county of Dorset	25
Thereundersigned Charles Fish and others, of Great Gidding, Huntingdonshire	45
Members of the Wesleyan Methodist Congregation, Scamblesby, in the county of Lincoln	55
Wesleyan Methodist Congregation worshipping in Newtown Row Chapel, Birmingham	130
Members of the congregation of Wesleyan Methodists worshipping in the Wesleyan Methodist Chapel at Shirley, in the county of Hants	73
Inhabitants of the parish of Alveston, in the county of Warwick	14
Gardeners of Garraway's Nursery, Durdham Down, Clifton, Bristol	33
Inhabitants of Sudbury, in the county of Suffolk	182
Moderator and members of the Kirk Session of South Parish, Aberdeen, in session assembled. Signed in name and by appointment of the said Kirk Session, the 18th day of February 1856, Thomas Dewar, Moderator	1
Inhabitants of the parishes of Mountshannon and Clonrush, in the county of Galway	54
Inhabitants of Puriton, in the county of Somerset	94
Members of the congregation of Wesleyan Methodists worshipping at Trawden, in the county of Lancaster	68
Inhabitants of Tewkesbury and its immediate vicinity	558
Inhabitants of Temple Guiting, Gloucestershire	90
Inhabitants of Bawdrip, Horsey, Chilton, Polden, and Stawell	112
Inhabitants of West Hampnett, Sussex	25
Thereundersigned William Edwards and others	62
Inhabitants of Chichester	22
Inhabitants of Snaith and neighbourhood, in the county of York	236
Thereundersigned John Hicks and others	86
Calvinistic Methodists assembling at Old Castle, Bridgend, in the county of Glamorgan	5
Members of the congregation of St. Arvan's Chapel, near Chepstow, in meeting assembled, 4 February 1856, Henry Smith	1
Inhabitants of the parish of Killygarven, county of Donegal, Ireland	89
Inhabitants of Machynlleth, in the county of Montgomery	92
Inhabitants of the city of Peterborough	318
Inhabitants of Hemington, in the parish of Lockington, in the county of Leicester	70
Inhabitants of Marsh Gibbon, in the county of Buckingham	49
English Wesleyan Methodists of Brynmaur, Breconshire	93
Members of Holy Trinity Church, in Darlington, in the county of Durham	93
Inhabitants of the parish of Acton, in the county of Suffolk	67
Members of the Wesleyan Methodist Congregation, Tetford, in the county of Lincoln	114
Members of the Wesleyan Chapel, Bodymoor Heath, Birmingham	51
Thereundersigned Joseph Fuller Parke, and others	52
Inhabitants of Kegworth, in the county of Leicester	71
Members of the Wesleyan Church and Congregation in Dartford	24
Adherents of the Free Church of Dunichen	228
Inhabitants of Mossley, near Congleton	82

	Signatures.
Clergy, ministers, bankers, merchants, and other residents of Newcastle-upon-Tyne. Signed in name and on behalf of the meeting held at the Assembly Room, Newcastle-on-Tyne, on February the 12th 1856, Thomas H. Graham, Chairman	1
Attendants at the Erdington Dissenting Chapel	80
Inhabitants of the district of St. Bartholomew, St Pancras, London	142
Rector, curate, churchwardens and others, householders of the parish of Ovington, Norfolk	43
Inhabitants of the borough of Newbury, in the county of Berks, in public meeting assembled. Signed on behalf and by order of the meeting, John H. Mason, Mayor	1
Inhabitants of the parish of Owsby, in the county of Cumberland	21
Inhabitants of Southport, publicly convened. Signed on behalf of the meeting, Peter Wood, M.D., Chairman of the Commissioners, Chairman. Town Hall, Southport, 11th February 1856	1
Members of the Wesleyan Methodist Congregation worshipping in Bradford	127
Thereundersigned John Ash and others	29
Inhabitants of the city of Exeter	2,200
Members of the congregation worshipping at Milton-road Chapel	96
Inhabitants of the borough of Kingston-upon-Hull	3,222
Inhabitants of St. Thomas, Lambeth	964
Inhabitants of Templemichael, in the county of Longford, Ireland	152
Inhabitants of Penge, near Sydenham	35
Minister, deacons, and members of the congregation of Protestant Dissenters	48
Inhabitants of the parish of Llanfihangel, in the county of Montgomery	104
Members of the Wesleyan Congregation, Northwold, Norfolk	32
Members of the congregation worshipping at the Wesleyan Methodist Chapel, Sedgefield, Durham	27
Inhabitants of Barton, Cambridgeshire	54
Inhabitants of the parish of Nether Nutsford, in the county of Chester	33
Wesleyans of the town and neighbourhood of Darlington	228
Inhabitants of St. Martin's, Scilly	47
Inhabitants of the parish of Overton Waterville, in the county of Huntingdon	52
Inhabitants of Newbold on Avon	40
Members of Wesleyan Methodist Congregation, Wragley, in the county of Lincoln	110
Members of congregation assembling in the Wesleyan Methodist Chapel, Brandon, Norfolk	43
Female subjects resident in Sheffield and its neighbourhood	12,867
Parishioners of Llanefydd, in the county of Denbigh	105
Inhabitants of Youghall, county Cork, Ireland	40
Minister, elders, and parishioners of Keltins, Forfarshire, Scotland	224
Members of the society and congregation of Wesleyan Methodists worshipping at the Wesleyan Chapel, Church-street, in the city of New Sarum, Wilts	72
Members of Wesleyan Methodist Congregation worshipping in Belmont-row chapel	166
Inhabitants of Wordsley, Stafford	100
Members of the Wesleyan Methodist Congregation, Beechford, in the county of Lincoln	49
Office bearers of the United Presbyterian Congregation, Mill-street, Montrose	17
Baptist Congregation, Tobermory, Mull, Argyleshire	62
Welsh Wesleyan Methodist congregations worshipping at Brecon, Upper Lock, and Pwllgloyw, in the county of Brecon	79
Members and adherents of the United Presbyterian Congregation, Montrose	308
Protestant Dissenters of congregations assembling within the parish of Leigh, in the county of Worcester	209
Inhabitants of the town of Thornbury, in the county of Gloucester	73
Members of the congregation of the Welsh Calvinistic Methodists at Nantyglo	145
Members of the Wesleyan Church and Congregation, Romsey, Hants	28
Inhabitants of Herne Bay, in the county of Kent	7
Thereundersigned Rev. S. Fisher and others	93
Members of congregation of Wesleyan Methodists worshipping in the town of Stratford-upon-Avon, Warwickshire	64
Members of the congregation worshipping in the Wesleyan Methodist Chapel, Bideford, Devon	142
Inhabitants of Thwaite	8
Inhabitants of Awre, Gloucestershire	89
Inhabitants of Navenby, Lincoln	81
Members of the Wesleyan Methodist Congregation, Bardney, in the county of Lincoln	79
Members of the Wesleyan Methodist Congregation worshipping at Glossop, in the county of Derby	43
Members of the congregation worshipping in the Wesleyan Methodist Chapel, Barrowford, in the county of Lancaster	106
Members of the church and congregation assembling in York-street Chapel, Walworth	271

	Signatures.
Parishioners of Ramochy, county Donegal	143
Members of the Baptist Church meeting in Rattray's Court, Seagate, Dundee	5
Clergy, gentry, tradesmen, and principal inhabitants of the township of Beard, Ollerset, Whitle, and Thornset, in the county of Derby	166
Householders of the parish of Ramsholt, Suffolk	56
Inhabitants of the parish of Ropley, in the county of Southampton	103
Inhabitants of the parishes of Donoughmore and Kiltrisk, county Wexford, Ireland,	47
Inhabitants of Wilton and Lakenheath, Norfolk	92
Members of the Wesleyan Congregation meeting at Padstow, Cornwall	127
Thereundersigned Edward Walker West, Vicar of Milborne Port, Somersetshire, and others	101
Members of the congregation worshipping in the Wesleyan Methodist Chapel, Colne, in the county of Lancaster	172
Inhabitants of Lansart, in the county of Cornwall	18
Inhabitants of Leicester	25
Kirk Session and members of the Free Church of Scotland, Shetland, Walls	9
Members of the congregation of Wesleyan Methodists worshipping at Earby, in the county of York	27
Thereundersigned Henry M. Barlow, clerk, Burgh Woodbridge, and others	35
Thereundersigned S. W. Reid and others	68
Inhabitants of Grendon Underwood, Bucks	43
Nonconformists' families, inhabitants of Weymouth, Melcombe Regis, and their vicinities	932
Committee of the "Glasgow Working Men's Sabbath Protection Association." Signed in name and by appointment of the committee of the "Glasgow Working Men's Sabbath Protection Association," Glasgow, 4th February 1856, Thomas Grey, Chairman, John Lemon, Secretary	2
Thereundersigned Thomas Clayton and others	64
British subjects resident in the Island of Jersey	242
Members of Wesleyan Methodist Congregation, Minting, in the county of Lincoln	62
Inhabitants of the parish of Sudborough, in the county of Northampton	37
Thereundersigned Rev. S. C. Sarjant and others	87
Members and friends of the congregations worshipping in the Wesleyan Methodist Chapels, in the parish of Ludgvan, in the county of Cornwall	81
Wesleyan Methodists at Horseley Woodhouse, in the county of Derby	126
Protestant inhabitants of Newmarket, county Cork	15
Members of the congregation of Wesleyan Methodists worshipping at Barnoldswick, in the county of York	37
Members of the Wesleyan Methodist Congregation worshipping at Whitfield, in the parish of Glossop, in the county of Derby	25
Thereundersigned Joseph Coulthard, J. P., and others	211
Members of the congregation of the Episcopal Chapel, Gray's Inn Road	211
Inhabitants of Pawlett, Somerset	67
Members of the society and congregation of Wesleyan Methodists at Bitterne, in the county of Hants	28
Inhabitants of Wickhambrook, Suffolk	98
Inhabitants of Rougham, in the county of Norfolk	48
Members of the congregation worshipping in the Wesleyan Methodist Chapel, Marsden, in the county of Lancaster	100
Inhabitants of Llansannan, Denbighshire	25
Thereundersigned Irwin Lloyd, M. A., Incumbent of Southgate, and others	50
Inhabitants of Birch, in the county of Essex	113
Members of Wesleyan Methodist Congregation of Chepstow, Monmouthshire	36
Members and friends of the congregation worshipping in the Wesleyan Methodist Chapel, Marazion, in the county of Cornwall	80
Inhabitants of the town of Thrapston, in the county of Northampton	46
Thereundersigned Robert Hall, Minister, of London-street Chapel, and others, worshipping in London-street Chapel, Basingstoke, Hampshire	140
Thereundersigned John Johnson and others	125
Parishioners of Killashee, county Longford	35
Thereundersigned James Robinson and others	130
Inhabitants of Burton	49
Inhabitants of the borough of Cardiff	356
Officials in the parish of Middleham, county of Durham	9
Incumbent and churchwardens of Killoconnigan, Meath; Orland T. Dobbin, LL.D. of Trinity College, Dublin, Incumbent; Charles Walker, Alexander Montgomery, Churchwardens	3
Thereundersigned Mourant Brook, Vicar of Lyncombe and Widcombe, and others	456
Inhabitants of Tredington	67
Thereundersigned J. P. Bacon and others, chiefly worshippers at Lower Edmonton Chapel and Enfield Highway	102
Thereundersigned William Walker, Vicar of Bardney, and others	60
Inhabitants of the parish of Paston, &c.	142
Inhabitants and householders of the parish of Saint Stephen, in the city of Norwich	451

	Signatures.
Office-bearers and members of the Free Church of Kinfauns, Perthshire	170
Members of the Session of the United Presbyterian Congregation of Craigend, in the Presbytery of Perth. Signed in name and by authority of Session, this 14th day of February 1856, Jas. Forsyth, Moderator, Daniel Kintoul, Session Clerk	2
Members of the Presbyterian Congregation of Ballykelly, Londonderry, Ireland	144
Minister and Kirk Session of the parish of Colvend, in the Stewartry of Kirkcudbright; James Fraser, Minister of Colvend, for the Kirk Session of Colvend	1
Thereundersigned Jabez Palmer of Perth, and others	59
Inhabitants and visitors of Ventnor and its vicinity, in the Isle of Wight	582
Inhabitants of Saint Saviour's, Chelsea, and its vicinity	690
Thereundersigned Hodden Hambrook and others	45
Thereundersigned John Wesley Dawson, Wesleyan minister, and others	95
Inhabitants of the parish of Lamberhurst, in the county of Kent	29
Working men of Dover, Kent	713
Inhabitants of Clitheroe, in the county of Lancaster	372
Inhabitants of Burton	49
Inhabitants of the parish of Alves, shire of Elgin	229
Thereundersigned John Locke and others	74
Clergy of the deanery of Trig Major, in the diocese of Exeter, in the county of Cornwall, assembled at their meeting the 17th day of April 1856	10
Inhabitants of Teignmouth, in the county of Devon	119
Members of the Wesleyan societies and congregations worshipping in Downend, Winterbourne, Frampton, and Thornbury, Gloucestershire	117
Members of congregation worshipping at Barnet. Signed on behalf of the Congregational Church, Barnet, J. Chisman Beadle, Pastor; George Gregory, James Flether, Deacons	3
Inhabitants of the town and parish of Crewkerne, in the county of Somerset	52
Inhabitants of the town of Coggeshall, in the county of Essex	45
Vicar, churchwardens, and other inhabitants of the parish of Laughton, in the county of Sussex	91
Inhabitants of Middleham and Wensleydale	97
Inhabitants of the town and parish of Tonbridge, in the county of Kent	224
Inhabitants of Bagworth, in the county of Leicester	
Members of the congregation worshipping in the Wesleyan Chapel at Elmswell, Suffolk	34
Inhabitants of the parish of Delgany, county of Wicklow	88
Members of the Wesleyan Methodist Congregation, Milton-road, Gravesend	77
Members of Mount Pleasant Wesleyan Chapel, Leek, in the county of Stafford	180
Inhabitants of the parish of Hayton, in the county of Cumberland	323
Members of the congregation of Cranshaws, and inhabitants of the neighbourhood	156
Members of the Wesleyan congregations in the town and vicinity of Thetford, in the county of Norfolk	136
Members of a congregation of Protestant Dissenters, meeting at Roade, Northamptonshire	65
Minister, deacons, and members of the church and congregation assembling for Divine worship in Percy Chapel, Charlotte-street, Bath	436
Members of the congregation worshipping in the Independent Chapel, Wood Dalling, Norfolk	32
Inhabitants of Shanklin and neighbourhood	36
Members of Dartford Wesleyan Congregation	34
Members of the congregation worshipping in the Wesleyan Chapel, Ixworth, Suffolk, on Sunday the 3d day of February 1856	30
Ministers of the Gospel and Sunday-school teachers in the town of Tonbridge, in the county of Kent	68
Inhabitants of Tiverton, in the county of Devon	78
Wesleyan Methodists and others of the town of Huntingdon and places adjacent	228
Inhabitants of Thornton, in the county of Leicester	42
Thereundersigned Henry Elgar, Rector of Hardington Mandeville, and Pendomer, and others	87
Inhabitants of the parish of Loddiswell, in the county of Devon	7
Inhabitants of Turvey, in Bedfordshire, and its neighbourhood	56
Inhabitants of the parish of Slagoe	72
Inhabitants of the City of London and others	343
Inhabitants of the parish of Ardnamurchan, Inverness	17
Members of the Kirk Session of Cranshaws, in the Presbytery of Dunse, Berwickshire; William M. Hutton, moderator, William Berham, Alexander Edgar, elders	3
Inhabitants of Beckenham, in the county of Kent	20
Inhabitants of the parish of Ruyton in the Eleven Towns, in the county of Salop	70
Protestant Dissenters of Handsworth, Staffordshire	90
Inhabitants of Hogsthorpe, in the county of Lincoln	70
Members of the Wesleyan Methodist Congregation, Ballyclare, county Antrim	34
Inhabitants of the parish of Sutton Coldfield, in the county of Warwick	119

	Signatures.
Inhabitants of the township of Casterton and neighbourhood, in the Kirkby Lonsdale, in the county of Westmorland	48
Wesleyan Methodists and others resident in the town of Northampton	192
Inhabitants of the chapelry of Sand, Wilts	38
Members of the Wesleyan Methodist Church and Congregation in the town of Belper, county of Derby	115
Inhabitants of Chapel-en-le-Frith, Derbyshire	58
Clergy, churchwardens, and others, inhabitants of the parish of Great Warley	80
Inhabitants of the parish of Upminster, in the county of Essex, and its vicinity	98
Inhabitants of Chatham, in the county of Kent	615
Inhabitants of Great Warley, in the county of Essex, and the neighbourhood	112
Inhabitants of the parish of Monkwearmouth, in the borough of Sunderland, in the county of Durham	737
Members of the Wesleyan Methodist Congregation worshipping at Wesley Chapel, Howard Town, in the parish of Glossop, in the county of Derby	88
Inhabitants of St. Austell, in the county of Cornwall	329
Thereundersigned James Anderson and others of Paisley	146
Inhabitants of Kirklinton, near Ripon, Yorkshire	90
Parishioners of Claygate, near Esher, Surrey	17
Inhabitants of Longbredy, Littlebredy, and Kingston-Russell, in the county of Dorset	88
Members of a congregation of Wesleyan Methodists at Tintwistle, in the parish of Motham, in the county of Chester	56
Members of a congregation of Wesleyan Methodists worshipping at Wolverhampton	193
Protestant inhabitants of the parish of Geashill, division of Killeigh, King's County, Ireland	57
Members and seatholders worshipping in the Wesleyan Chapel at Farnworth	140
Members of the church and congregation assembling in the Croft Independent Chapel, Hastings, in the county of Kent	112
Inhabitants of the parish of Long Melford in Suffolk	186
Members of the Wesleyan Methodist Congregation in Kilburn	96
Inhabitants of Stratford-upon-Avon	191
Inhabitants of Leven, county of Fife, Scotland	154
Parishioners of Eckington, Worcestershire	36
Inhabitants of the parish of Preston-upon-Stour	148
Protestant Dissenters assembling in Providence Chapel, Ovenden, near Halifax	143
Inhabitants of Frome	233
Members of the Ayr Presbytery of United Seceders, signed in name and by authority of Presbytery this 7th day of March 1856, George Rogers, Presbytery Clerk	1
Parishioners of Crich, in the county of Derby	105
Inhabitants of the parish of Leslie and Premnay, Aberdeenshire	95
Inhabitants of Exton, Rutland	74
Minister and Session of the United Presbyterian Church, Annan	8
Members of the Baptist Church and Congregation of Barnley, near Leeds, Yorkshire	75
Inhabitants of Beckenham, Kent	59
Members of the United Presbyterian Congregation of Westray and others	192
Inhabitants of Ayton in Cleveland	246
Clergy, gentry, and other inhabitants of the township and neighbourhood of Henley, in the parish of Almonbury, in the West Riding of the county of York	99
Members of the congregation of Protestant Dissenters worshipping in the Independent Meeting-house, Oulton, Norfolk, and other inhabitants of the same neighbourhood	140
Inhabitants of Winchester and its vicinity	717
Working-classes of Crewe, in public meeting assembled. Signed on behalf of the meeting, which comprised 300 operatives, John B. Wheeler, chairman	1
Wesleyan Methodist Congregation of Dayhuline, Flixton, and Urmston, in the county of Lancaster	183
Inhabitants of the district and members of the congregation of St. Mary's, North End, Fulham	187
Thereundersigned John Bone and others	47
Wesleyan Methodist Congregation at Barton-on-Irwell, near Manchester	145
Inhabitants of the parish of Breedon-on-the-Hill, in the county of Leicester	108
Inhabitants of Barnet, in the county of Middlesex	118
Inhabitants of Saint Mary's, Scilly Isles	94
Clergy, gentry, and other inhabitants of the parish of Bishop's Teignton, in the county of Devon	174
Inhabitants of the borough of Bridgewater, assembled at a town's meeting on the 12th day of February 1856. Signed on behalf of the meeting, N. D. Bath, mayor	1
Members of Wesleyan Methodist Congregation of Eccles, in the county of Lancaster	134
Inhabitants of the parish of Worthington, in the county of Leicester	159
Inhabitants of the parish of Easton-on-the-Hill, in the county of Northampton	170
Inhabitants of the parish of Dallas, in the county of Moray	135

	Signatures.
Ministers and elders of the Presbytery of Lancashire, comprising 21 churches in connexion with the Presbyterian Church of England. Signed in the name and by the authority of the Presbytery of Lancashire, by Robert H. Lundie, Moderator, Birkenhead, 30 January 1856	1
Inhabitants of Ulverstone and its vicinity	112
Inhabitants of the parish of Mudford	75
Thereundersigned A. Pollock, jun., Bailie of Paisley, and others	2,390
Members of the Wesleyan Church and Congregation of Hay and Glasbury, Breconshire	69
Inhabitants of the town and neighbourhood of Tunbridge Wells	417
Members of the congregation of Wesleyan Methodists worshipping in the Great Bridgewater-street Chapel, Manchester	293
Inhabitants of the parish of Abby, in the county of Norfolk	26
Minister, office-bearers, and members of the congregation worshipping in the Wesleyan Chapel at Brixton Hill, in the county of Surrey	53
Incumbent, churchwarden, and other members of the congregation of Christchurch, Chelsea	76
Inhabitants of Woodstone, Huntingdonshire	144
Inhabitants of Scilly	42
Members of the Wesleyan societies and congregations at Chartershaugh, Shiney-row, and Newcastle, each in the county of Durham	67
Thereundersigned Charles English, M. A., Perpetual Curate of Sydenham, and others	543
Inhabitants of Tintern, Monmouthshire	19
Members of the society and congregation of Wesleyan Methodists worshipping at the Wesleyan Chapel at Fisherton Anger, in the borough of New Sarum, in the county of Wilts	54
Members of the Spicer-street Chapel, St. Albans	35
Members of the congregation assembling in Queen-street Independent Chapel, Leeds	109
Minister, office-bearer, and members of the congregation worshipping in the Wesleyan Chapel, China-terrace, Lambeth	143
Inhabitants of the district of Bardsley, in the parish of Ashton-under-Lyne, in the county of Lancaster	233
Minister, supporters, and congregation of West-street Episcopal Chapel, St. Giles-in-the-Fields	804
Inhabitants of the parish of Bradford, near Taunton, Somerset	77
Members of the congregation worshipping in the Wesleyan Chapel, Lyminge, in the county of Kent, and also of other persons	49
Members of the congregation worshipping in the Wesleyan Chapel, St. Mary's-square, Bury St. Edmunds, on Sunday, the 3d February 1856	30
Office-bearers of Free Lady-lone Church, Arbroath	31
Clergy, ministers, gentry, and other inhabitants of the town of Whitby, in the county of York, friendly to the due observance of the Sabbath Day, in public meeting assembled. Signed on behalf of the meeting, John Blanchard, Chairman	1
Inhabitants of Fenceton, near Burnley, Lancashire	134
Inhabitants of the parish of Woking, in the county of Surrey	89
Incumbent, assistant minister, churchwardens, and inhabitants of Southborough, of the parish of Tunbridge, in the county of Kent	112
Inhabitants of the parish of Veryan, in the county of Cornwall	165
Inhabitants of the parish of Warsop, in the county of Nottingham	178
Minister, office-bearers, and members of the congregation worshipping in the Wesleyan Methodist Chapel, Grosvenor-place, Walworth	144
Inhabitants of the village of Harley, Salop	119
Inhabitants of Christchurch, Virginia Water, parish of Egham, Surrey	143
Inhabitants of Groby, in the county of Leicester	29
Inhabitants of Hawes	29
Minister, elders, and deacons of the Free Middle Church, Perth	29
Inhabitants of Chusett, Suffolk	22
Inhabitants of Littlebury, in the county of Essex	28
Inhabitants of the borough of Watchel, Somersetshire	47
Thereundersigned John Wesley Wilson and others	62
Members of the congregation worshipping at Hastings Wesleyan Chapel, and others	306
Inhabitants of Deeping St. James, Lincolnshire	40
Members of the Wesleyan Congregation, Bear Dane in Shaw, Cheshire	53
Inhabitants of Kilchy parish, county Down, Ireland	22
Thereundersigned Henry Wallbridge and others	80
Members of the Wesleyan Congregation, Biddulph, Cheshire	72
Thereundersigned H. E. Osborn, Upper Manor-street, Chelsea, and others	88
Office-bearers of East Free Church, Arbroath	22
Inhabitants of the parochial district of Shirley, in the county of Southampton	385
Persons attending Divine worship in the Baptist Chapel, in the parish of Burnham, in the county of Essex	27
Inhabitants of the parish of Rainham, in the county of Kent	46

	Signatures.
Baptists of Toddington, Beds	13
Members of the Wesleyan Congregation, Germoe and Renneggy, in the county of Cornwall	84
Thereundersigned William Camhill, of Crickness, and others	156
Inhabitants of the parish of Eastor, Sutton, and Upton, in the county of Northampton	154
Inhabitants of the Royal burgh of Rothesay, adopted at a public meeting convened in terms of a requisition to the provost, and held on 13 February 1856	1,244
Inhabitants of the parishes of Swanton, Morley, and Worthing, in the county of Norfolk	28
Members of the Wesleyan Congregation at Dane in Shaw, Cheshire	21
Members of the Wesleyan body, Colliery Row and Moersley, in the county of Durham	172
Members of the church and congregation of Wesleyan Methodists, West Wellow, Wilts	67
Parishioners of the parish of Langley, in the county and diocese of Worcester, in vestry assembled, signed on behalf of the parishioners, William Laing, perpetual curate of Langley, chairman	1
Inhabitants of Preston Gabbold	40
Members of the Wesleyan Congregation, Bosley	28
Inhabitants of the village of Sompting, in the county of Sussex	98
Ministers and elders of the Free Church Presbytery of Aberdeen, signed in name and by authority of the Free Church Presbytery of Aberdeen	1
Members of the Wesleyan Congregation at Smallwood, Cheshire	42
Members of the Wesleyan Congregation, Congleton	30
Inhabitants of the parish of Condover, in the county of Salop	109
Inhabitants of the village of Gardenstown and neighbouring district, in the parish of Gunvrie, Banffshire, Scotland	259
Presbytery of Dunoon and Inverary of the Free Church, in Presbytery assembled, on the 7th day of May, in the year 1856. Signed by the moderator in name and by appointment of the said Presbytery, Robert Rose, Moderator	1
Inhabitants of the village of Sheinton, Salop	31
Inhabitants of Cold Overton, Leicestershire	19
Inhabitants of the parish of Holywell, in the county of Flint	169
Inhabitants of Lower Swell, Gloucestershire	54
Inhabitants of the town and parish of Usk, in the county of Monmouth	79
Female inhabitants of Brighouse, in the county of York	409
Francis H. S. Say, Vicar of Braughing, Herts, and others	8
Members of the Wesleyan Congregation, Key Green, Cheshire	57
Inhabitants of Stanley and neighbourhood	287
Wesleyan Sabbath School Teachers of the city of Durham	29
Inhabitants of Rainow, in the county of Chester	30
Ministers and people of Shiringham, Norfolk	88
Minister and office-bearers of St. David's Free Church, Glasgow. Signed in name and by appointment of the office-bearers of Free St. David's Church by G. Lorimer, D. D., Glasgow, May 1856	1
Members of the Wesleyan Congregation at Goldsithney, in the parish of Perranuthnoe, county of Cornwall	70
Members of the Free Church Presbytery of Stirling. Signed in name and by appointment of the Free Presbytery of Stirling, this 10th day of May 1856, by John Wright	1
Inhabitants of the parish of Upper Chelsea, in the county of Middlesex	864
Inhabitants of Southampton	2,485
Female inhabitants of Stirling and others	1,149
Members of the Wesleyan Congregation, Davenport, Cheshire	48
Minister and members of the Free Church Congregation in Dishford, county of Banff	81
Inhabitants of the parish of Tetsworth, in the county of Oxford	88
Thereundersigned Gilbert Meikle, minister, Inverary, and others	136
Inhabitants of Bedford, being females above the age of twenty	194
Hamilton Sabbath Protection Committee. Signed in name and by appointment of committee, Thomas Struthers, Chairman	1
C. Inhabitants of Chelmondiston and its immediate neighbourhood	141
C. Inhabitants of the parishes of Fordley, Middleton, and Weselton, in the county of Suffolk	44
C. Inhabitants of the parish of Otley, in the county of Suffolk	89
C. Inhabitants of Saxmundham and its neighbourhood	50
C. Inhabitants of Great Bealings, in the county of Suffolk	41
C. Inhabitants of the parish of Aldeburgh, in the county of Suffolk	92
C. Thereundersigned John Padnell Palmer and others, assembling for Divine worship at the Independent Chapel, Hadleigh	111
C. Inhabitants of Wickham Market, in the county of Suffolk	151

		Signatures.
C.	Inhabitants of the hundred of Stow, in the county of Suffolk	118
C.	Inhabitants of Helmingham, in the county of Suffolk	46
C.	Inhabitants of the parish of Newbourne, Suffolk	200
C.	Inhabitants of Needham Market	203
C.	Inhabitants of the city of Bath and its vicinity	3,639
C.	Inhabitants of Tuddenham St. Martin, in the county of Suffolk	69
C.	Inhabitants of Holbrook, in the county of Suffolk	60
C.	Inhabitants of Stowmarket and its vicinity	84
C.	Members of the congregation assembling in the Chapel of the late Countess of Huntingdon, in the city of Bath	280
C.	Inhabitants of Napton-on-the-Hill	82
C.	Inhabitants of the parish of Bildeston, Suffolk	103
C.	Inhabitants of the parish of Tattingstone, in the county of Suffolk	41
C.	Inhabitants of Cratfield, in the county of Suffolk	90
C.	Inhabitants of the parish of Swilland, in the county of Suffolk	51
C.	Inhabitants of the parish of Sweffling, Suffolk	70
C.	Inhabitants of the parish of Buckleshaw, in the county of Suffolk	18
C.	Inhabitants of the parish of Leistone	53
C.	Inhabitants of the parish of Laxfield	273
C.	Inhabitants of Rushmere St. Andrew, in the county of Suffolk	95
C.	Inhabitants of Bruisyard, in the county of Suffolk	45
C.	Inhabitants of Rendham, in the county of Suffolk, and others	135
C.	Inhabitants of Dallinghoo	30
C.	Inhabitants of the parish of Ashbocking, in the county of Suffolk	24
C.	Inhabitants of the united parishes of Friston and Snape, county of Suffolk	304
C.	Inhabitants of the borough of Ipswich	2,569
C.	Inhabitants of Woodbridge, in the county of Suffolk	237
D.	Inhabitants of the parish of Charlton Kings, in the county of Gloucester	256
D.	Worshippers at Long Ashton Chapel, near Bristol	64
D.	Thereundersigned Emily Clifford, and other females, inhabitants of the city of Bristol, and its vicinity	5,200
D.	Mothers and mistresses of families, in the parish of Clifton, with the district of St. John the Evangelist, in the city of Bristol	2,322
D.	Inhabitants of the parish of Blagdon, in the county of Somerset	62
D.	Mothers and mistresses of households in the parish of Sydenham, in the county of Kent	178
D.	Inhabitants of the parish of Tarrant Gunville, in the county of Dorset	98
D.	Sunday-school teachers of Thorpe, in the county of Derby	7
D.	Parishioners of St. Jude, Bethnal Green, London	141
D.	Female inhabitants of the parish of Ilfracombe, in the county of Devon	264
D.	Mothers in connexion with Arthur-street Chapel, Newington, in the county of Surrey	75
D.	Inhabitants of Altarnum, in the county of Cornwall	211
D.	Workmen of the cotton factory in the city of Bristol, and members of various religious communities	250
D.	Clergymen of the Church of England, and ministers of various denominations within the town and borough of Sunderland, and in the county of Durham	27
D.	Mothers in Camberwell, in the county of Surrey	31
D.	Clergy, churchwardens, and members of the congregation of the district of St. Luke's, Warwick-street, in the parish of St. James, Westminster	120
D.	Thereundersigned John Hayden and others, belonging to the denomination of Christians commonly called Independents, assembling for Divine worship in Trinity Chapel, High Wycombe	146
D.	Sunday-school teachers of Holbrooke, in the county of Derby	20
D.	Sunday-school teachers of the parish of Riddings, in the county of Derby	120
D.	Inhabitants of the parish of Risley, in the county of Derby	54
D.	Minister, elders, and deacons of John Knox's Free Church Congregation, Glasgow	24
D.	Female inhabitants of the parish or district of Minchinhampton and neighbourhood, in the county of Gloucester	600
D.	Mothers and mistresses of households in the parish of Harrogate, in the county of York	293
D.	Inhabitants of the parish of Breaston	
D.	Sunday-school teachers of the parish of St. Alkmund, Derby, in the county of Derby	39
D.	Mothers in Camberwell, county of Surrey	65
D.	Female residents in Clonakilty and neighbourhood, in the county of Cork, Ireland	131
D.	Clergy, churchwardens, and parishioners of St. James's, Westminster	427
D.	Sunday-school teachers of the parish of Pinxton, in the county of Derby	40

		Signatures.
D.	Wives, mothers, and daughters of the parish of Melksham, in the county of Wiltshire	583
D.	Female inhabitants of the district and congregation of St. John's, Derby, in the county of Derby	1,106
D.	Female inhabitants of the parish or district of Holmesfield, in the county of Derby	66
D.	Female inhabitants of the parish of Chesterfield, in the county of Derby	158
D.	Clergymen, members of a meeting convened by the Rural Dean of Stone, on Monday, February 4, 1856	
D.	Inhabitants of the parish of Newhall, in the county of Derby	146
D	Female inhabitants of the parish of Northcain, in the county of Sussex	180
D.	Female inhabitants of the parish of Braisford, in the county of Derby	153
D.	Female inhabitants of the parish of Holbrooke	209
D.	Female inhabitants of the parish of Parwick, in the county of Derby	83
D.	Female inhabitants of the parish of Hognaston, in the county of Derby	43
D.	Female inhabitants of Derby, in the county of Derby	7,464
D.	Sunday-school teachers of the parish of Mere, Wilts	84
D. G.	Inhabitants of the town of Cricklade, in the county of Wilts	126
G.	Inhabitants of the parish of Holmesfield, in the county of Derby	64
G.	Inhabitants of the parish of Hognaston, in the county of Derby	66
G.	Inhabitants of the parish of Pleasley	29
G.	Inhabitants of Midsomer Norton, in the county of Somerset	239
G.	Inhabitants of the parish of Ridgeway, in the county of Derby	119
G.	Inhabitants of the parish of Pinxton	281
G.	Inhabitants of the parish of Alveston and Boulton, in the county of Derby	69
G.	Inhabitants of the parish of Walton, in the county of Derby	48
G.	Ministers and elders of the Free Church Synod of Dumfries, in Synod assembled. Subscribed in our name and by our authority, Charles Watson, Moderator of the Free Church Synod of Dumfries	1
G.	Inhabitants of the parish of Kniveton, in the county of Derby	40
G.	Reverend the Free Presbytery of Hamilton, the shire of Lanark. In name and by authority of the Free Presbytery of Hamilton, R. C. Smith, Moderator	1
G.	Inhabitants of the parishes of Dalbury and Trusley, in the county of Derby	70
G.	Inhabitants of the district of Christchurch	256
G.	Inhabitants of the parish of Holbrook, in the county of Derby	151
G.	Inhabitants of the parish of Chapel-en-le-Frith, in the county of Derby	265
G.	Inhabitants of the parish of Bentley, in the county of Derby	52
G.	Inhabitants of the parish of Clifton, in the county of Derby	63
G.	Inhabitants of the parish of Chesterfield, in the county of Derby	364
G.	Inhabitants of the township of Winster, in the county of Derby	52
G.	Inhabitants of the parish of Elvaston, in the county of Derby	40
G.	Inhabitants of the parish of Thorpe, in the county of Derby	47
G.	Inhabitants of the parish of Hartington (town quarter), in the county of Derby	42
G.	Inhabitants of the parish of Riddings, in the county of Derby	260
G.	Female inhabitants of Stanton-by-Dale Abbey, in the county of Derby	59
G.	Members of the Sabbath Alliance of Scotland. Signed in name and behalf of the Alliance, George Lyon, chairman	1
G.	Inhabitants of the parish of Wilne, in the county of Derby	54
G.	Inhabitants of the parish of St. Alkmand, in the county of Derby	180

THE following memorials express the most devoted loyalty to Her Majesty's person and Government; state that the memorialists have learned with deep sorrow of the public performance of military bands for mere amusement on the Lord's Day, and implore Her Majesty to interpose to arrest such proceedings.

	Ministers and elders of the Commission of the General Assembly of the Free Church. Signed in name and by their appointment, at Edinburgh, the 10th day of December 1855 years, by James Henderson, D.D., Moderator. (There are two similar memorials from this body)	2

THE following memorials marked thus (D*), after expressing loyalty and attachment, view with regret the public performance of MILITARY BANDS on the Lord's Day; and also the attempts which have been lately made to open the BRITISH MUSEUM, NATIONAL GALLERY, AND OTHER PLACES OF PUBLIC AMUSEMENT on that day, and pray Her Majesty to withhold Her sanction from these proceedings; and also to put a stop to RAILWAY AND OTHER TRAVELLING, and all other similar employments on Sundays.

D*	Meeting of the congregation usually assembling in Beulah Chapel, near Chepstow, Thomas Thompson, esq., of Piercefield-park, Chepstow, in the chair. Signed by order of the congregation, Thomas Thompson, chairman, Piercefield-park, 4 February 1856	1

Signatures.

D* Meeting of the members of congregation assembled at Beulah Chapel, Chepstow, 23 March 1856, Thomas Thompson, esq., Piercefield-park, Chepstow, in the chair. Signed by order of the Congregation, Thomas Thompson, of Piercefield-park, Chepstow; Thomas Rees, minister of the chapel; Henry Smith, deacon - - - - - - - - - - - - 3

D* Meeting of the congregation assembled in their chapel at St. Arvan's, Chepstow, Thomas Thompson of Piercefield-park, Chepstow, in the chair. Signed per request of the Congregation, Thomas Thompson, of Piercefield-park, Chepstow, chairman; Thomas Rees, minister of the Gospel; John Porter, assistant minister - - - - - - - - - 3

THE following memorials, marked (M.), call attention to sundry desecrations of the LORD'S DAY; viz., SUNDAY JOURNALS, THE OPENING OF SHOPS AND PUBLIC-HOUSES, THE PLYING OF BOATS AND VESSELS ON CANALS AND RIVERS, THE RUNNING OF RAILWAY TRAINS, THE TRANSMISSION OF THE MAILS, AND THE DELIVERY OF LETTERS, and pray Her Majesty to prevent the assemblage of the higher classes in Her Majesty's Parks on the Lord's Day; to put a stop to the playing of the MILITARY BANDS AT WINDSOR, AND IN KENSINGTON GARDENS; to refuse the sanction to the opening of the BRITISH MUSEUM, NATIONAL GALLERY, AND CRYSTAL PALACE, on the Lord's Day; and to adopt other measures for the due observance of that day.

Signatures.

M. G. Clergymen of the Church of England, in the town and county of Derby - 152

M. G. Women connected with the Wesleyan Methodist Church and Congregation in the town of Belper, county of Derby - - - - - - - 176

The following memorials, marked thus (F. L.), also pray Her Majesty to prohibit all PUBLIC AMUSEMENTS AND SALE OF REFRESHMENTS on the Lord's Day in the Royal Parks:

F. L. Members of the Stanton-by-Dale Female Benefit Society - - - - 106

F. L. Mistresses and Sunday-school teachers, with certain of the clergy in the city of Winchester, assembled at their annual meeting - - - - 130

The following memorial, marked thus (N. G.), after asserting that since the reign of King Alfred the Great, laws have been from time to time made to restrain outward acts of desecration of the Lord's Day, notices the attempts to procure the opening of the BRITISH MUSEUM, NATIONAL GALLERY, CRYSTAL PALACE, AND OTHER EXHIBITIONS ON THAT DAY, the orders given last summer for the public performance of a MILITARY BAND OF MUSIC IN KENSINGTON GARDENS, and prays Her Majesty to withhold Her sanction from such proceedings, and to use Her Royal influence with all AMBASSADORS, PLENIPOTENTIARIES, CONSULS, VICE-CONSULS, AND OTHER REPRESENTATIVES and officers of Her Majesty in foreign courts and countries, to the end that they may fully represent Her Majesty as a gracious Queen that reverences and sanctifies the Sabbath, and that they may keep holy the Lord's Day in their own households and habits, abstaining from joining or countenancing customs contrary thereto. It alludes to the vast amount of *labour* still required on the Lord's Day, notwithstanding the improvements that have lately taken place in some particulars, including the discontinuance of CABINET COUNCILS, CABINET DINNERS, AND THE LARGE RESORT OF THE HIGHER CLASSES TO THE PARKS, and the management of the EXHIBITION OF 1851; and further prays Her Majesty to use Her influence to prevent RAILWAY AND OTHER TRAVELLING, and all similar employments, on the Lord's Day:—

N. G. Company and servants of Sudbrook-park Hydropathic Establishment, near Richmond, Surrey, proprietor, James Ellis, M. D.; also of the artisans, labourers and workmen employed by Dr. Ellis upon his farms situate in the parishes of Petersham, Ham, and Kingston - - - - 46

The memorial from the Hamilton Sabbath Protection Committee also objects to the performance of BANDS IN GARRISONS on Sunday.

A memorial from Bedford quotes the example of DOSUMO, KING OF LAGOS, who ordered a public notice to be written, to prevent beating of drums, or causing any kind of disturbance on Sunday near places of worship.

MILITARY BANDS ON SUNDAYS.

RETURN of the Number of MEMORIALS, with the Total Number of SIGNATURES attached thereto, praying for the Discontinuance of the Performance of MILITARY BANDS on SUNDAYS, which have been forwarded through the Home Office, stating the PLACES from which such Memorials have been sent.

(*Marquis of Blandford.*)

Ordered, by The House of Commons, *to be Printed,*
13 *June* 1856.

281.

Under 2 oz.

MUSIC IN KENSINGTON GARDENS.

RETURN to an Address of the Honourable The House of Commons, dated 27 May 1856;—*for*,

A "COPY of CORRESPONDENCE between the ARCHBISHOP of CANTERBURY and the FIRST LORD of the TREASURY, on the SUPPRESSION of MUSIC in KENSINGTON GARDENS on SUNDAYS."

Treasury Chambers, Whitehall, 2 June 1856. } JAMES WILSON.

The Archbishop of *Canterbury* to Lord *Palmerston*.

My Lord, Lambeth, 10 May 1856.

YOUR Lordship must permit me to address you on a subject on which I ought perhaps to have communicated with you sooner, but on which I can no longer be silent, either on my own account or on that of many of my episcopal brethren, who are appealed to very earnestly respecting the Sunday music in the Park.

It is with much reluctance that I interfere in a matter which has the sanction of Her Majesty's Government, and in which a large class of persons is interested whom we should be most unwilling to deprive of any harmless gratification. But the letters and petitions which reach me daily, and call for an expression of my opinion either in Parliament or elsewhere, make it impossible for me to conceal from your Lordship the feelings with which these performances are regarded, and the offence which they occasion to a large and influential portion of Her Majesty's subjects. These consider the question, as to their continuance or discontinuance, a vital question as concerns the national religion.

Concurring as I do in these sentiments, I feel it a duty which I owe to my station to represent them to your Lordship.

I have, &c.
(signed) *J. B. Cantuar.*

Lord *Palmerston* to the Archbishop of *Canterbury*.

My dear Lord, Broadlands, 10 May 1856.

I RECEIVED your letter of to-day, just as I was leaving London for this place. I concurred in the arrangements for performances by military bands in Kensington Gardens and in the Parks, for a couple of hours on Sunday afternoon, after Divine service, because I thought that those arrangements would afford the inhabitants of the metropolis innocent intellectual recreation combined with fresh air and healthy exercise, and such recreation did not seem to me to be at variance with the soundest and purest sentiments of religion. Such was my opinion, and such is my opinion still; for I have heard nothing on the part of those who object to these arrangements which has altered my view of the matter.

But I find from your Lordship's letter, and from representations which have reached me from other quarters, that a great number of persons whose opinions are entitled to respect, look upon the matter from a different point of view, and entertain in regard to it strong opinions widely different from my own.

In this state of things I am naturally led to ask myself, whether the advantage to be gained by a continuance of these musical performances is sufficiently great to compensate for the evil of running counter to the religious feelings of a large body of the community; and to that question there can be but one answer, namely, that it is not. I shall therefore, in deference to the sentiments expressed by your Grace, on your own part, and on that of others, take steps for discontinuing the band playing in Kensington Gardens and in the Parks on Sundays.

My dear Lord,
Yours, &c.
(signed) *Palmerston.*

MUSIC IN KENSINGTON GARDENS.

COPY of CORRESPONDENCE between the ARCHBISHOP of CANTERBURY and the FIRST LORD of the TREASURY, on the SUPPRESSION of MUSIC in KENSINGTON GARDENS on SUNDAYS.

(*Sir John Shelley.*)

Ordered, by The House of Commons, *to be Printed,*
4 June 1856.

SAINT JAMES'S, &c., PARKS.

RETURN to an Order of the Honourable The House of Commons, dated 21 April 1856;—*for*,

AN ACCOUNT, "in detail, of the Expenditure of £. 12,773. 19 *s.* 3 *d.* by the Commissioners of Works on St. James's, &c. Parks, for the Year ending the 31st day of March 1855:"

"And, like Account for the Year ending March 1856."*

	Year ending 31 March 1855. £. *s.* *d.*	Year ending 31 March 1856. £. *s.* *d.*
Ordinary Works and Repairs to Lodges, Boundary Walls, &c., viz., 9 Lodges St. James's and Green Parks, 13 Lodges Hyde Park.		
Repairs to Lodges, Walls, &c.:		
Hyde Park	164 6 –	268 8 2
St. James's and Green Parks	301 19 6	212 8 –
New Works:		
Hyde Park	Nil.	Nil.
St. James's and Green Parks	Nil.	92 18 11
Repairs to Fences, Iron Railings, Gates, &c., and Painting:		
Hyde Park	42 15 –	58 14 4
St. James's and Green Parks	279 15 3	24 6 6
Maintenance of the Roads, Rides, Parades, Malls, and Footpaths	3,860 14 –	5,185 – 7
Watering Roads, Rides, Malls, and Footpaths, viz.:		
The Roads, Rides, and Drives in Hyde Park, including the New Ride	520 – –	1,334 10 –
The Roads, Parade, Malls, &c. in St. James's Park, and the Carriage Drives and Footpaths on Constitution Hill	295 – –	295 – –
Maintenance of Water-trucks, Leather Hosepipes, Service Pipes, Cocks, Stand Posts, and watering the Footpaths in the Inclosure of St. James's Park	167 18 4	183 6 6
Wages of Labourers employed in keeping in order the Pleasure Grounds and Gardens, and for purchase of tools, plants, flower seeds, &c.	664 16 5	859 1 9
Salaries and Wages of Constables, Gatekeepers, Watchmen, &c. Including 1 Inspector, at 30 *s.* per week. 11 Constables, „ 21 *s.* „ 1 ditto „ 17 *s.* 6 *d.* „ 6 Gatekeepers, „ 18 *s.* 1 *d.* „ 1 Night Watchman, „ 25 *s.* „ Men employed to relieve Patrol and Gatekeepers 14 *s.* to 21 *s.* „	1,330 12 7	1,328 9 4
Liveries for Constables, Gatekeepers, &c.	160 4 6	172 11 –
Feed for Aquatic Birds	40 15 –	84 10 10
General Works, including transplanting trees and shrubs, providing and repairing park seats, rail fences, and iron hurdles; materials and labour for maintaining the banks of the Serpentine; purchase of manure, and cost of carting and spreading the same; purchase of grass seeds, &c.	1,024 9 7	2,086 4 8
Lighting, including the providing and repair of lanterns, mains and services	1,523 5 3	1,207 5 8
Supply of water to the Serpentine, to the Canal in St. James's Park, and for public urinals and water-closets	37 – –	38 10 –
Contributions in aid of Parochial Assessments	986 18 8	985 9 4
Draining paths on the North side of the Inclosure of St. James's Park; the ground on the South side of the Serpentine, and carriage road on the North side of Hyde Park; and ground in the Green Park	901 7 11	383 3 1
New Iron Post and Rail Fencing on the South side of Hyde Park	– – –	878 2 4

(*continued*)

* *Note.*—The items of payment are inserted in the year in which they were actually made, but the works to which such payments relate were in some cases partially performed in the previous year.

	Year Ending 31 March 1855.			Year Ending 31 March 1856.		
	£.	s.	d.	£.	s.	d.
Making new Footpaths in Hyde Park	-	-	-	721	4	3
Taking down and rebuilding the Lodge at James-street, Buckingham Gate, erecting new gates and piers, and improving the approaches to St. James's Park	-	-	-	2,450	5	10
Filling in the Basin in the Green Park opposite Devonshire House	-	-	-	155	11	6
Salary of Superintendent (including his services in Kensington Gardens)	200	-	-	200	-	-
Wages of Foreman and Time Clerk, acting under the immediate orders of the Superintendent in the general services of the Parks and in Kensington Gardens, 30*s.* per week	79	10	-	78	-	-
Paid Architect for professional services	125	-	-	28	3	-
Contingencies	67	11	3	80	11	10
TOTAL £.	12,773	19	3	19,391	17	5

Alfred Austin,
Secretary.

Office of Her Majesty's Works and Public Buildings,
9 July 1856.

ST. JAMES'S, &c., PARKS.

ACCOUNT, in detail, of the EXPENDITURE of £. 12,773. 19*s.* 3*d.* by the Commissioners of Works on ST. JAMES'S, &c., PARKS, for the Year ending 31 March 1855; and like Account for the Year ending 31 March 1856.

(*Mr. Blackburn.*)

Ordered, by The House of Commons, *to be Printed,*
11 *July* 1856.

352.

NEW PALACE (WESTMINSTER).

RETURN to an Order of the Honourable The House of Commons, dated 5 February 1856;—*for*,

COPIES "of TREASURY MINUTES, dated the 6th day of February 1854, and the 29th day of January 1856, in regard to the Claims of Sir *Charles Barry* for Services connected with the Building of the NEW PALACE at *Westminster*."

Treasury Chambers, Whitehall, 7 February 1856.

JAMES WILSON.

COPY of TREASURY MINUTE, dated 6 February 1854.

MY Lords have had under their consideration a letter addressed to the Chancellor of the Exchequer by Sir Charles Barry, on the subject of his remuneration as architect for the New Houses of Parliament.

It appears, that when these works were first undertaken the estimate for the shell of the building only was 707,104 *l.*, and that Lord Bessborough, who was at that time Chief Commissioner of Woods and Forests, and, as such, charged with the department of Works, agreed that the remuneration to the architect should be 25,000 *l.*, and Sir Charles Barry stated that he accepted that arrangement, but under protest, that it was unprofessional.

My Lords have carefully examined into the circumstances which were likely to have influenced Lord Bessborough in fixing the remuneration of the architect at that sum, and they find that, for many years prior, the rate of commission paid by the Board of Works to the most eminent architects of the day was 3 per cent. They find that the attached architects of the Board of Works, viz. Sir John Soane, Sir Robert Smirke, and Mr. John Nash, were, by Treasury regulations, paid at the rate of 3 per cent. on the public works executed under their direction. It is true that those gentlemen had also salaries of 500 *l.* each attached to their offices, but those salaries were understood to be a remuneration for the professional advice which they were expected to afford to the Government, for which they received no other pay, and not as any part of their remuneration as architects for the performance of works placed under their care. On these terms the following works were performed by those eminent architects:—

New Stamp and Legacy-Duty Office, Somerset House;
Military Depôt, Tooley-street;
New Buildings, British Museum;
New Post-office;
Custom House (Restoration);
New Courts of Judicature, Westminster;
Insolvent Debtors Court;
Committee-rooms, House of Lords;
Library and Committee-rooms, House of Commons;
Whitehall Chapel (Restoration);
New State Paper Office;
New Royal Mews, Pimlico;
King's Stand, Ascot;

And my Lords find that the only exception to this rule was as regards the New Palace at Buckingham Gate.

With regard to that work, Mr. Nash was paid at the regular rate of 3 per cent. up to September 1826, when it was raised to 5 per cent., but for what reason my Lords have not been able to ascertain.

My Lords further find, that the allowance made by the Board of Works to architects unattached to their establishment, has been at the rate of 3 per cent., and that the following works were executed by Mr. Burton at that rate:

New Stable Court, Westminster;
New Stone House, Grenadier Guards, Westminster;
Inclosing ground, north side New Mews, Westminster.

As an exception to that rule, Sir Jeffery Wyatville was paid 5 per cent. for the restoration of Windsor Castle, under a special agreement with the Treasury in 1826, by which he engaged not to charge for his journeys, which in those days were expensive, and some other extras usually charged by architects.

Looking, then, to the rule which had been established so long in the office over which Lord Bessborough presided, and to the close proximity which the sum fixed by his Lordship bears to the estimate then made for the mere shell of the building, and to the probable amount of the cost of such fittings as would be placed under the superintendence of the architect, my Lords can arrive at no other conclusion than that in fixing that sum for the entire work, his Lordship did so, with a view to the rate of commission usually paid by the department, preferring to take a fixed sum rather than a commission, as is not unfrequently done, under the impression that it may avoid an extension of the works, and consequently of the cost.

My Lords advert to the great increase in the expenditure upon these works, and to the circumstances under which such increase has from time to time taken place, to such an extent, that the outlay up to this time is nearly double the sum originally intended. They also advert to the circumstance that with regard to some portion of that expense connected with the internal fittings, assistance and advice other than that of Sir Charles Barry has been obtained, and it appears that in this way Mr. Pugin was employed for some time at a salary of 200 *l.* a year.

Under all the circumstances of the case, my Lords have arrived at the conclusion that a fair and even liberal remuneration to Sir Charles Barry will be, that he should be paid at the rate of 3 per cent. upon the cost of the works which have been and may hereafter be performed under his supervision, including the fittings, &c., of the building, but subject to a deduction of the amounts which shall appear to have been paid for the assistance rendered by Mr. Pugin.

My Lords, therefore, desire that the Board of Works may be requested to furnish this Board without delay with an exact account of the expenditure up to the 31st December 1853, and that an account shall also be furnished of the several amounts of money which from time to time have been paid to Sir Charles Barry on account of the said works; and whatever balance shall appear to be due to Sir Charles Barry upon such an account, my Lords will be prepared at once to discharge.

Also desire that the Board of Works will, in the present and in every future year, include in their annual Estimates for the new Houses of Parliament a sum equal to 3 per cent. on the probable outlay of the year, as a remuneration to the architect, and desire that at the close of every year the value of the work performed may be accurately ascertained, and the commission of the architect punctually discharged on the principles laid down in this Minute.

In respect to the cost of measuring the work as it has proceeded, my Lords advert to the fact, that in the arrangements between the Board of Works and the architects alluded to in the former part of this Minute, the understanding was, that that cost should be borne by the Board of Works. My Lords are therefore of opinion that Sir Charles Barry should be held free from any charge on that account. They, therefore, request that the Board of Works will report to this Board all the facts in connexion with the measurement of the works, and my Lords

Lords will be prepared to reimburse Sir Charles Barry any sum which he shall appear to have expended thereon.

My Lords are pleased further to request that the Board of Works will report fully to this Board as to the best mode in which the measurement of the work should in future be made as they proceed, having reference specially to that plan which will afford the most secure check upon public expenditure.

Write to the Board of Works and Sir Charles Barry in terms hereof.

Copy of Treasury Minute, dated 29 January 1856.

My Lords advert to their Minute of the 6th February 1854, in reference to the claims of Sir Charles Barry as architect of the new Houses of Parliament.

By that Minute, my Lords arrived at the opinion that a commission of 3 per cent. upon the cost of the building already incurred would be a fair and liberal remuneration to Sir Charles Barry, and that the same rate of commission should be allowed on the future expenditure.

My Lords, however, reserved for further consideration a claim which had been made for the payment for certain services performed by the late Mr. Pugin, upon which, as well as with regard to the question of measurement of works, past and future, my Lords called for a report from the Board of Works. My Lords also requested to be informed of the exact cost of the buildings up to the latest date then ascertainable, and of the amount of moneys which from time to time had been paid to Sir Charles Barry.

From the report of the Board of Works, it appears that up to the 2d of October 1853 the cost of the building amounted to 1,506,845 *l.* 10 *s.*, but with regard to which the Board of Works reports that works to the amount of 14,439 *l.* were not strictly subject to commission. They also report, that up to that date Sir Charles Barry had received payments on account of commission, amounting in all to 44,735 *l.* 3 *s.* 9 *d.*

With regard to measurements, it appears by the same report that Sir Charles Barry had paid out of pocket the sum of 11,457 *l.* 18 *s.* 10 *d.* for that work, and that he had employed, in a portion of that duty, officers of the Board of Works, but who had been paid extra for such services. From explanations made, my Lords arrived at the conclusion that the moneys paid to Mr. Pugin should be allowed as extras. The Report of the Board of Works referred to, dated the 22d January 1855, however, brought before this Board several new claims upon the part of Sir Charles Barry for extra remuneration over and above his commission, but which appeared to my Lords to be generally of a nature which were covered by the commission of 3 per cent. upon the outlay.

Mr. Wilson now states to the Board that at the instance of Sir Charles Barry, Mr. Meadows White, as his friend, sought several interviews with him for the purpose of endeavouring to come to a settlement in respect to the numerous questions in dispute.

A List of Sir Charles Barry's claims for extra payment was put in by Mr. White, and consisted of:—

1. Services for Plans in connexion with some contemplated arrangements in the New Building for the deposit of Public Records.

2. Services in assisting and advising the Fine Arts Commission in respect to arrangements to be made in the Houses of Parliament.

3. Services in respect to Warming and Ventilating the Houses of Parliament.

4. Returns to Parliament and attendance on Parliamentary Committees.

5. Other services in respect to Warming and Ventilating.

6. For directions to workmen, &c., in the Wood and Stone Carving Departments.

7. For purchase of Stock on behalf of Government.

8. For procuring Casts from the best examples of Mediæval Carving, &c.

9. For extra Designs after the original Plans were made.

10. For miscellaneous services, resisting unfair claims of contractors, &c.

It appears to my Lords, that with the exception of any charge, which, Sir Charles Barry may be able to show he is entitled to, for conducting the ventilation and lighting of the Houses of Parliament, all the other charges were fairly to be included in the Commission of the Architect.

Looking, however, at the question as a whole, and desirous to put an end to these long disputed points, and after having consulted the Board of Works, the following offer was made to Mr. White, as acting for Sir C. Barry, on the 26th of May last, with a view finally to settle all questions as to commission, measurement, and all other claims, up to the 2d of October 1853, to which date the closed accounts extended.

1st. That a commission of *three per cent.* should be allowed on the entire outlay of 1,506,845*l.*, up to the 2d of October 1853.

2d. That a remuneration for measurement upon the whole of the works included in that outlay should be paid at the rate of *one per cent.*

3d. That these commissions should cover all demands of every kind whatsoever for the past, the services for warming, lighting, and ventilating alone excepted, which should be dealt with separately, and upon their own merits.

4th. That the remuneration of Sir Charles Barry for the future should be fixed at .

Three per cent. commission on the outlay as Architect, and One per cent. for measurement upon all works to which measurement applies; and that no furniture, &c., should in future be furnished by Sir C. Barry except by the special order of the Treasury.

After numerous further interviews and discussions with Mr. White, that gentleman on the part of Sir Charles Barry declined the terms of settlement thus offered, and pressed again the claims for the extra services performed.

My Lords having again referred Sir C. Barry's claims for a report to the Board of Works, and having very carefully reviewed the whole case, continue to be of opinion that the terms herein stated are not only fair, but liberal; that they include all remuneration to which Sir C. Barry is justly entitled for the services he has performed; and that Their Lordships could not extend the same consistently with Their duty to the public.

Considering moreover that this matter has gone on for nearly 20 years without any distinct understanding being arrived at, notwithstanding the efforts of every successive Board of Treasury to do so, my Lords are of opinion that it is inconsistent with the public interests that it should be any longer delayed; and They therefore, as far as They are concerned, must record these terms as Their final decision upon the questions at issue. They are pleased, consequently, to direct that no further payment be made on account, until a final settlement of the past, and an agreement as to the future, are concluded.

Let a copy of this Minute be forwarded to Sir Charles Barry, and to the Board of Works.

NEW PALACE (WESTMINSTER).

COPIES of TREASURY MINUTES, dated the 6th day of February 1854 and the 29th day of January 1856, in regard to the Claims of Sir *Charles Barry* for Services connected with the Building of the NEW PALACE at *Westminster*.

(*Mr. Wilson.*)

Ordered, by The House of Commons, *to be Printed,*
8 *February* 1856.

25.

Under 1 *oz.*

147

NEW PALACE (WESTMINSTER).

RETURN to an Order of the Honourable The House of Commons, dated 22 February 1856;—*for*,

COPIES "of all CORRESPONDENCE between the Treasury and Sir *Charles Barry*, and also with Mr. *White* on his behalf, respecting the REMUNERATION of the ARCHITECT of the NEW PALACE at WESTMINSTER up to the present Time (in continuation of Parliamentary Paper, No. 491, of Session 1849)."

Treasury Chambers, Whitehall, 31 March 1856.

JAMES WILSON.

(*Mr. Tite.*)

Ordered, by The House of Commons, *to be Printed*, 1 *April* 1856.

LIST of PAPERS relating to Sir *Charles Barry*'s CLAIM.

DATE.	FROM AND TO WHOM LETTERS WRITTEN.	EPITOME.	PAGE.
1854:			
February 8	The Treasury to Sir Charles Barry	- - Containing a Report of Precedents as to Remuneration at 3 per cent. - - - - - - - -	4
„ 7	Mr. Edward M. Barry to the Treasury.	- - As to Sir Charles Barry's Illness, and postponing Replies - - - - - - - - - - -	6
March 14	Sir Charles Barry to the Treasury -	- - Reply to Treasury Proposition of the 8th February 1854, as to Precedents, and with Counter Precedents as to fixed Sum of 25,000 *l.* having been unfairly forced on him	6
September 5	Sir C. Trevelyan to Sir C. Barry -	- - In reply to Sir C. Barry's Letter of 14th March, and stating that the Lords Commissioners had reserved two points for reconsideration - - - - - -	10
„ 18	Sir C. Barry to Sir C. Trevelyan -	- - In reply to Letter of 5th September, stating that the ordinary Commission would be inadequate to the labour bestowed, and presuming that the accuracy of his former statement, relative to Precedents of Payments not having been questioned, is admitted - - - - - -	10
October 2	Sir C. Trevelyan to Sir C. Barry -	- - Not admitting the accuracy of Sir C. Barry's statements of Payments hitherto made to Architects, and offer to advance 5,000 *l.* on account, but on the principle of remuneration already laid down - - - - - -	11
„ 12	Sir C. Barry to Sir C. Trevelyan -	- - In reply to Letter of 2d October, as to former statements as to Remuneration, and as to order for payment on account of 5,000 *l.* - - - - - - - - -	11
„ 30	Mr. Wilson to Sir C. Barry - -	- - Stating that there were no questions in suspense as to the principle of Remuneration, and that the former terms must, as regards the Lords, be considered conclusive, and that the acceptance of the 5,000 *l.* would be regarded as admission of that principle - - - - - - -	12
November 20	J. M. White, Esq., to the Treasury	- - In reply to Letter from the Treasury of the 30th ult., considering Sir C. Barry's construction on Letter of 2d ult. a fair one, and requesting information on two points: 1st, of the numerous Designs under direction of Chiefs of Departments rendered useless by subsequent orders; 2d, as to Allowance for making up Accounts - -	12
1855:			
March - 31	Mr. White to Mr. Wilson - -	Requesting Reply to Letter of 20th November last -	13
May - 10	Mr. White to Mr. Wilson - -	- - Urging Replies to Letters of 20th November and 31st March - - - - - - - - - -	13
„ - 14	The Treasury to Mr. White - -	- - Making appointment on the subject of Sir C. Barry's Claims - - - - - - - - - -	13
„ - 23	The Treasury to Mr. White - -	Making appointment for the following day - - -	13
„ - 24	The Treasury to Mr. White - -	- - Requesting Letter of Authority which Sir C. Barry received from the Board of Works as to supply of Furniture for Mr. Meeson's rooms - - - - -	14
1853:			
January 11	- - - - - - - -	- - Paper handed by Mr. White to Mr. Wilson, being Authority signed by Mr. Phillips to Sir C. Barry for completion and appropriation of rooms for Mr. Meeson -	14
1855:			
May - 26	- - - - - - - -	- - Paper of Terms handed by Mr. Wilson to Mr. White at an interview on this day, containing proposed Terms of Settlement - - - - - - - - -	14
„ - 31	Mr. White to the Treasury - -	- - Relative to Proposals to Remuneration, and suggesting a Reference; requesting also to be furnished with Copies of Reports, Statements, and Communications made by the Board of Works to the Treasury on the subject of Sir C. Barry's Claims, in order that he might reply - -	15

DATE.	FROM AND TO WHOM LETTERS WRITTEN.	EPITOME.	PAGE.
1855:			
June - 20	Mr. White to Mr. Wilson - -	For Answer to Letter of 31st May 1855 - - -	15
„ - 28	Letter from the Treasury to Mr. White.	Making an appointment - - - - - -	16
July - 14	Mr. White to Mr. Wilson - - (A paper with this Letter, with account of special and extraordinary services, of same date.)	On the case generally - - - - - - -	16
„ - 21	Treasury to Mr. White - -	Making appointment for same day - - - -	19
„ - 23	Treasury to Mr. White - -	- - Stating that as some Claims were new, inquiries would be made - - - - - - - - - -	19
„ - 31	Mr. White to Mr. Wilson - -	- - Relative to settlement of Claims; withdrawing on behalf of Sir Charles his assent to reduce Commission, and proposing Reference - - - - - - -	19
August 22	Mr. White to Mr. Wilson - -	- - Requesting reply, and stating readiness to go into detail in the event of a Reference - - - - -	20
November 28	Treasury to Mr. White - -	Making appointment for following day - - -	20
„ 30	Mr. White to Mr. Russell - -	- - For copy of Return of the Board of Works of Expenditure up to its date, on which Mr. Wilson's offer of 4 per cent. would operate, for examination - - -	20
December 1	Mr. Russell to Mr. White - -	Making appointment - - - - - - - -	20
„ 12	Mr. White to Mr. Wilson - -	- - Retiring from case, and enclosing Letter (A.) from Sir C. Barry to Mr. White, stating willingness to accept 4 per cent. upon the cost of all works executed and to be executed from his designs; this to include making up accounts; also 500 *l.* per annum for warming, ventilating, &c.; also 5,000 *l.* for other important services; also replies to objections (B.) - - - - - - - -	20
1856:			
January 29	Copy Treasury Minute - -	- - By which the final decision of the Board adhered to the following terms:— 1. That a commission of 3 per cent. should be allowed on the entire outlay of 1,506,845 *l.*, up to 2d October 1853. 2. That a remuneration for measurement upon the whole of the works included in that outlay should be paid at the rate of 1 per cent. 3. That these commissions should cover all demands, of every kind whatsoever, for the past; the services for warming, lighting, and ventilating, alone excepted, which should be dealt with separately on their own merits. 4. That the remuneration of Sir C. Barry for the future should be fixed at 3 per cent. commission on the outlay as architect, and 1 per cent. for measurement on all works to which measurement applied, and no furniture to be furnished by Sir C. Barry without special Treasury Order - - - - - - - - -	23
February 9	Sir C. Barry to Mr. Wilson - -	- - Acknowledging receipt of Letter of 5th instant, with Treasury Minute, and replying thereto, and calling attention to former explanation on several points - - -	25
„ 18	Sir C. Barry to Mr. Wilson - -	- - Enclosing copy of letter from Sir B. Hall, as to Sir C. Barry's application to the Board of Works respecting further information with reference to Treasury proposal -	26
„ 18	Sir B. Hall to Sir C. Barry - -	- - As to want of authority as to Treasury proposal, and that no documents were in Sir B. Hall's possession, of which copies had not been sent to the Treasury - -	26
„ 19	Mr. Wilson to Sir C. Barry - -	- - Stating that the Board of Works would afford information respecting the amount for warming, lighting, and ventilating, and the works on which 1 per cent. commission for measuring would thereafter be allowed - -	27

CORRESPONDENCE between the Treasury and Sir *Charles Barry*, and also with Mr. *White* on his behalf, respecting the REMUNERATION of the ARCHITECT of the NEW PALACE at WESTMINSTER, up to the present Time.

From the Treasury to Sir *Charles Barry*.

Sir, Treasury Chambers, 8 February 1854.

I AM commanded by the Lords Commissioners of Her Majesty's Treasury to acquaint you that my Lords have had under their consideration a letter addressed by you to the Chancellor of the Exchequer on the subject of your remuneration as architect for the New Houses of Parliament.

It appears that when these works were first undertaken the estimate for the shell of the building only was 707,104 *l.*, and that Lord Bessborough, who was at that time Chief Commissioner of Woods and Forests, and, as such, charged with the Department of Works, agreed that the remuneration to the architect should be 25,000*l.*, and you state that you accepted that arrangement, but under protest, that it was unprofessional. I have to state that my Lords have carefully examined into the circumstances which were likely to have influenced Lord Bessborough in fixing the remuneration of the architect at that sum, and they find that, for many years prior, the rate of commission paid by the Board of Works to the most eminent architects of the day was 3 per cent. They find that the attached architects of the Board of Works, viz., Sir John Soane, Sir Robert Smirke, and Mr. John Nash, were, by Treasury Regulations, paid at the rate of 3 per cent. on the public works executed under their direction. It is true that those gentlemen had also salaries of 500*l.* each attached to their offices, but those salaries were understood to be a remuneration for the professional advice which they were expected to afford to the Government, for which they received no other pay, and not as any part of their remuneration as architects for the performance of works placed under their care. On these terms the following works were performed by those eminent architects:

New Stamp and Legacy-Duty Office, Somerset House;
Military Depôt, Tooley Street;
New Buildings, British Museum;
New Post Office;
Custom House (Restoration);
New Courts of Judicature, Westminster;
Insolvent Debtors' Court;
Committee Rooms, House of Lords;
Library and Committee Rooms, House of Commons;
Whitehall Chapel (Restoration);
New State Paper Office;
New Royal Mews, Pimlico;
King's Stand, Ascot;

And my Lords find that the only exception to this rule was, as regards the New Palace at Buckingham Gate.

With regard to that work, Mr. Nash was paid at the regular rate of 3 per cent. up to September 1826, when it was raised to 5 per cent., but for what reason my Lords have not been able to ascertain.

My Lords further find that the allowance made by the Board of Works to architects unattached to their establishment has been at the rate of 3 per cent., and that the following works were executed by Mr. Burton at that rate:—

New Stable Court, Westminster;
New Stone House, Grenadier Guards, Westminster;
Inclosing Ground, North Side, New Mews, Westminster.

As

As an exception to that rule, Sir Jeffery Wyatville was paid 5 per cent. for the restoration of Windsor Castle, under a special agreement with the Treasury in 1826, by which he engaged not to charge for his journeys, which in those days were expensive, and some other extras usually charged by architects.

Looking, then, to the rule which had been established so long in the office over which Lord Bessborough presided, and to the close proximity which the sum fixed by his Lordship bears to the estimate then made for the mere shell of the building, and to the probable amount of the cost of such fittings as would be placed under the superintendence of the architect, my Lords can arrive at no other conclusion than that, in fixing that sum for the entire work, his Lordship did so with a view to the rate of commission usually paid by the Department, preferring to take a fixed sum rather than a commission, as is not unfrequently done, under the impression that it may avoid an extension of the works, and consequently of the cost.

My Lords advert to the great increase in the expenditure upon these works, and to the circumstances under which such increase has from time to time taken place, to such an extent that the outlay up to this time is nearly double the sum originally intended. They also advert to the circumstance, that with regard to some portion of that expense connected with the internal fittings, assistance and advice other than that afforded by you has been obtained, and it appears that in this way Mr. Pugin was employed for some time at a salary of 200 *l.* a year.

I have to apprise you that, under all the circumstances of the case, my Lords have arrived at the conclusion that a fair and even liberal remuneration to you will be, that you should be paid at the rate of 3 per cent. upon the cost of the works which have been and may hereafter be performed under your supervision, including the fittings, &c., of the building, but subject to a deduction of the amounts which shall appear to have been paid for the assistance rendered by Mr. Pugin.

My Lords have therefore requested the Board of Works to furnish this Board without delay with an exact account of the expenditure up to the 31st December 1853, and that an account shall also be furnished of the several amounts of money which from time to time have been paid to you on account of the said works; and whatever balance shall appear to be due to you upon such an account my Lords will be prepared at once to discharge.

My Lords have also desired that the Board of Works will, in the present and in every future year, include in their annual estimates for the New Houses of Parliament a sum equal to 3 per cent. on the probable outlay of the year, as a remuneration to the architect, and they have directed that at the close of every year the value of the work performed may be accurately ascertained, and the commission of the architect punctually discharged on the principles herein laid down.

In respect to the cost of measuring the work as it has proceeded, my Lords the advert to the fact, that in the arrangements between the Board of Works and architects alluded to in the former part of this communication the understanding was, that that cost should be borne by the Board of Works. My Lords are, therefore, of opinion that you should be held free from any charge on that account. They have therefore requested that the Board of Works will report to this Board all the facts in connexion with the measurement of the works, and my Lords will be prepared to reimburse you any sum which you shall appear to have expended thereon.

I have to add that my Lords have been pleased further to request that the Board of Works will report fully to this Board as to the best mode in which the measurement of the work should in future be made as they proceed, having reference specially to that plan which will afford the most secure check upon public expenditure.

I am, &c.

(signed) *James Wilson.*

From Mr. *Edward M. Barry* to the Treasury.

Sir, 1, Old Palace Yard, 7 February 1854.

My father having been for nearly a month confined to his room by severe illness, and being even now unable himself to attend to business, has requested me to acknowledge the receipt of your letter of the 8th instant, relative to his remuneration as architect of the New Palace at Westminster, and to say, that as soon as he may be sufficiently recovered, he purposes to lay before the Lords of Her Majesty's Treasury a few remarks in reply thereto.

I am, &c.
(signed) *Edward M. Barry.*

From Sir *Charles Barry* to the Treasury.

Sir, Clapham Common, 14 March 1854.

I regret that in consequence of a severe attack of illness more than two months since, from which I have not yet entirely recovered, I have been prevented from replying at an earlier period to your letter of the 8th ultimo, relative to my remuneration as the architect of the New Palace at Westminster.

The desire evinced by the Lords Commissioners of Her Majesty's Treasury to be guided, in determining the amount of my remuneration, by the precedent established in respect of the payments hitherto made to architects for the public buildings of the country generally, is all that I can fairly expect at their Lordships' hands, and is accordingly acknowledged with feelings of gratitude on my part. The fixed sum of 25,000*l.*, originally proposed by the late Lord Bessborough as a recompense for my services as the architect of the New Palace at Westminster, which, be it observed, was no less than 10,000 *l.* below what I was justly entitled to upon the amount of my estimate, was unfairly forced upon me, and I was compelled, under the existing circumstances, to acquiesce, but under a protest as to its insufficiency; the force of which has been greatly strengthened by the experience I have now had during a period of 17 years, in carrying into effect those portions of the New Palace which are now completed.

My acquiescence in the sum proposed by the late Lord Bessborough has, notwithstanding my protest and the manifest insufficiency of the amount, been deemed to be a bargain, the conditions of which were, that for a given sum of money the architect should carry into effect a given design in a given period, namely, six years, which conditions have been long set aside by circumstances over which I have had no control. By what process the late Lord Bessborough arrived at the conclusion that 25,000 *l.* was a fit and proper remuneration for the architect of such a building as the New Palace at Westminster, I have no means of knowing; but certainly it could not have been, as the Lords Commissioners of Her Majesty's Treasury seem to imagine, from any precedent then existing in his department, when all architects, without distinction, received at the least 5 per cent. upon the cost of their respective works. The precedent to which their Lordships allude, of paying the architects, who were formerly attached for a time to that Board, at the rate of 3 per cent., had then been abolished nearly seven years. But assuming, for the sake of argument, that his Lordship could have been guided, which is not in the least degree likely, by the precedent which had formerly been acted upon in his department in respect of its attached architects, it should be borne in mind, that although they received only 3 per cent. upon works, they were relieved of one of the most important of their professional duties, namely, the labour and responsibility of making contracts, measuring and making up accounts, &c., which it is evident the Board of Works has always considered to be equal to a further allowance of 2 per cent.; for as regards all other architects (with the exception, under special circumstances, of Mr. Burton in respect of a portion only of the public works executed under his direction) who have been, both formerly and since, employed upon public works, and who have been called upon to perform that duty, they have invariably received the accustomed amount of remuneration of 5 per cent. upon the cost of the respective works.

The

The following is a list of the most important public buildings upon which the respective architects have received 5 per cent., since the year 1832:

The British Museum;
The General Post Office;
The State Paper Office;
Whitehall Chapel;
Westminster Hall;
The National Gallery;
The New Front of Buckingham Palace;
The Museum of Economic Geology;
The New Money Order Office (St. Martin's-le-Grand);
The Royal Pavilion at Brighton;
St. Katherine's Hospital, Regent's Park;
The Lodges and Gateways in the Parks;
Kensington Palace;
Temporary Houses of Parliament;
Chapel Royal, St. James's;
The Courts of Law, &c. &c.

In some of these instances the architects were also relieved of the measuring, making up accounts, &c. It appears, therefore, that payment at the rate of 5 per cent. to the architects of all public buildings, has invariably been the rule of the Board of Works, since the year 1832; and that prior to that date the same rule prevailed, except in respect of those buildings which were carried into effect under the direction of those architects who were for a time attached to the Board, who received 3 per cent., for the reasons already mentioned. (*Vide Statement at the end of this letter*).

With reference to the additions and alterations made under the direction of Mr. Nash, at Buckingham Palace, and the subsequent alterations under Mr. Blore, at the same building; the remuneration received by those two gentlemen, was, not only at the rate of 5 per cent., but they were also relieved from the labour, cost, and responsibility as to measuring, &c.

As to the works at Windsor Castle, Sir Jeffrey Wyattville was not only paid at the rate of 5 per cent., but he also had the same relief afforded to him as to measuring, &c.; which circumstance, and not the payment to him of 5 per cent. as supposed by their Lordships, was, as appears by a Treasury Minute of the 6th October 1826, considered to be an equivalent for his journeys and some other extras usually charged by architects. Notwithstanding, however, this arrangement in lieu of a charge for journeys, Sir Jeffrey had also the advantage of having a residence assigned to him in the Castle free of charge, during the whole of the time he was employed upon the works of that building. In short, the payments made to the architects of the two above-mentioned works, together with the immunities and advantages which they enjoyed, constituted a remuneration fully equal to 7 per cent.

With respect to my own case, as regards the New Palace at Westminster, I have not only performed all the professional duties which Sir Jeffrey Wyattville and Mr. Nash performed in respect of Windsor Castle and Buckingham Palace, but I have in addition been called upon to take upon myself the labour and responsibility of making contracts, forming elaborate schedules of prices, measuring, and making up accounts amounting to nearly a million and a half of money, and of adjusting disputed claims to a considerable extent, from which onerous duties they were altogether exempt; and I have had at least as great, if not much greater difficulties than they had to contend with in carrying into effect the works at the New Palace at Westminster, owing to the necessity of forming an artificial foundation in the river; the limited clearances from time to time of the site; the necessity of keeping up old buildings, often a work of much difficulty and danger, and constantly adding temporary accommodation, so that the sittings of Parliament might not be interrupted; the interferences with the works by Parliamentary Committees and other authorities, involving numerous alterations and delays; and the impossibility, in consequence, of spending upon an average more than about 90,000 *l.* per annum, by which the works have now been in hand more than 11 years beyond the time originally assumed for their completion.

With reference to the measuring and making up accounts, &c., I beg to state that the mere reimbursement of my expenses, as proposed by their Lordships,

ships, would be no remuneration whatever to me for the share which I have personally taken, and the responsibility which I have incurred in that important portion of my duty.

In my letter to the New Palace Commissioners, of the 6th February 1849, which has been laid before Parliament, and to which letter, as it touches generally upon the prominent points of my case, I beg most respectfully to direct the attention of the Lords Commissioners of Her Majesty's Treasury, I enumerated the extra duties which have devolved upon me in consequence of my position as the architect of the New Palace, and which are not included in the ordinary remuneration of an architect. I have only to add to what I have therein stated, that the difficulties in acting with Dr. Reid were imposed upon me after the original design and construction had been matured and exemplified in all requisite drawings, &c., and the works had been actually commenced; and that the same difficulties have continued in a greater or less degree up to within about the last 18 months; and, as a further illustration of the extra labours to which I have adverted in that letter in respect of designing and re-designing each department of the New Palace successively, I may mention that with reference to that large portion of the building now in hand in Old Palace Yard, designs have been made and working drawings prepared no less than four times before the works were commenced, in consequence of the ever-varying directions of the chiefs of the department which is therein contained.

As regards Mr. Pugin, whose services are alluded to in your letter, their Lordships are altogether under an erroneous impression. The salary paid to that gentleman was not for any duties that usually devolve upon the architect in respect of designs, which designs have all emanated from myself, but for taking the charge and direction of the men employed by the Government in the wood-carving department, for which office he was pre-eminently qualified, not only on account of his knowledge of decorative art, but practically on account of the experience which he had previously acquired in following, at one period of his life, wood carving as a business. A similar arrangement was made in respect of the stone carving, which is also executed by workmen employed by the Government, by which a like appointment was conferred upon Mr. Thomas, who is still at the head of that department. Their Lordships will therefore perceive, that it would be manifestly unjust to make any reduction, as proposed, in my remuneration in respect of the salaries paid to the executive chiefs of either of these departments.

Their Lordships advert to the great increase of expenditure beyond the original estimate, and the circumstances under which such increase has from time to time taken place as, apparently, an element in the consideration of my claim; but I would most respectfully submit that the increase adverted to cannot fairly affect the amount of my remuneration, inasmuch as it has brought upon me more than a full and proportionate amount of extra labour, anxiety, and responsibility, and has been occasioned by circumstances beyond my control, as set forth in a Report of a Committee of the House of Commons, in 1844, and subsequently by the New Palace Commissioners, in a letter addressed by them to the Treasury on the 15th June 1849.

When, therefore, the difficulties which I have had to encounter for nearly 20 years, in conducting the great work at Westminster to its present state, are borne in mind, and it is considered that I have devoted, almost exclusively, the best part of my life to that work, and that in consequence of being its architect I have experienced the loss of nearly the whole of a lucrative private practice; that the invariable rule of the Board of Works has been to pay all architects at least 5 per cent., or in the same ratio, according to the duties which they have been required to discharge; and, more especially, when it is considered that the offer of remuneration now made to me for designing and carrying into effect the New Palace at Westminster, under all the circumstances and disadvantages already adverted to, does not, owing to the length of time during which the works have been in hand, exceed, after deducting my expenses, the sum of 1,500 *l.* per annum, I cannot doubt but that the Lords Commissioners of Her Majesty's Treasury will, upon a review of all the circumstances adverted to, admit that such an offer is very far short of meeting the justice of the case; and that with reference to its merits and to the precedents established, particularly in respect of the works of Windsor Castle and Buckingham Palace, &c., I am most fairly and justly entitled to, at least, the accustomed remuneration of the profession of 5 per cent.,

cent., including the measuring, &c., and an allowance for extra services, with such interest as may be due to me upon deferred payments, for designing and carrying into effect, under very peculiar and difficult circumstances, the largest, the most elaborate in its design and details, and the most important building in modern times.

I have, &c.
(signed) *Charles Barry.*

STATEMENT of AMOUNTS of PROFESSIONAL REMUNERATION Paid to ARCHITECTS by the GOVERNMENT on Account of various PUBLIC BUILDINGS.

Prepared at the Office of Works for Sir Charles Barry, in the year 1848, by which it appears that his Claim of 5 per cent., with reference to the New Palace at Westminster, is fully justified by precedent in the case of those Architects who have undertaken the same Duties as have been performed by himself.

PUBLIC WORKS.	Name of Architect.	Original and subsequent Estimates.	Nature of Contract, whether in gross or for Prices.	Work when Commenced.	Work when Terminated.	Amounts Annually Voted on Account.	Actual Cost.	Measuring, Valuing, and adjusting Accounts, by whom effected.	Rate and Amount of Remuneration to Architect.
BRITISH MUSEUM	Sir Robert Smirke, and subsequently by his brother, Sydney Smirke.	- - - -	For prices	Michaelmas 1823.	In progress	To 1847–48, £. 654,566, exclusive of sums voted for enlarging the site, and for sculpture for the building.	To Lady-day 1848, £. 656,451 13 1 including sums by sale of old materials.	By Office of Works until 1832, and subsequently by the architect.	3 per cent. until 1832, and subsequently 5 per cent.
MUSEUM of ECONOMIC GEOLOGY.	James Pennethorne.	£. 25,262 27,450	The superstructure in gross; the foundations at prices.	5th October 1846.	In progress	- - -	- - -	By the architect	5 per cent.
BUCKINGHAM PALACE, Additions now in progress.	Edward Blore	£. 150,000	For prices	End of year 1846.	In progress	1846 - £. 20,000 1847 - 50,000 1848 —	To Midsummer 1848, £. 67,212 12 8 including architect's commission, Clerk of Works, &c.	By the architect; but measurer paid by the Office of Works.	5 per cent.
BUCKINGHAM PALACE, First Additions.	John Nash, till 1830; subsequently Mr. Blore.	No Estimate submitted to the Office of Works.	Prices	Midsummer 1825.	1839	£. 100,000 6,497 78,750 4,850 55,000 £. 245,097	£. 106,403 3 3 86,413 1 10 55,349 10 5 £. 248,166 5 6	By the architect. By the Office of Works.	5 per cent. 3 per cent.
WORKS AT KEW - Palm House.	Decimus Burton	- - - -	In gross sums, one for the centre, one for the wings of Palm House.	1844 - -	In progress	To 1847–48, £. 27,500	To 1847-48, £. 28,505 12 -	By the architect	5 per cent.
WINDSOR CASTLE - Stables.	Sir Jeffry Wyatville, completed by Henry Ashton.	£. 70,000	At prices	Christmas Quarter 1839.	October 1842	£. 70,000 authorised by Act of Parliament to be charged on proceeds of sale of portions of the Land Revenue.	£. 70,509 14 3	By the architect	5 per cent. 5 per cent.
WINDSOR CASTLE - Additions.	Sir Jeffry Wyatville.	- - - -	At prices	Christmas Quarter 1824.	Christmas 1831	- - -	£. 616,849 17 8	By the Office.	5 per cent. No extra for journeys to Windsor.
NATIONAL GALLERY -	William Wilkins	- - - -	In gross -	Christmas 1833	Christmas 1837	£. 81,112	£. 81,784, including architect's commission, fittings, and some furniture, &c., £. 86,824 12 7	By the architect	5 per cent.
GENERAL POST OFFICE	Sir Robert Smirke.	£. 200,000, subsequently £. 29,101, principally for Fittings and Furniture, £. 229,101.	Prices	Lady-day Quarter 1824.	Christmas 1829	No vote, defrayed from funds of Post-office, by Treasury authority.	£. 337,863 18 4 including the public street paving.	By the Office of Works.	3 per cent.
WESTMINSTER MEWS -	Decimus Burton	No Estimate delivered for this Building.	Prices	About end of the year 1825, commencement of 1826.	Spring of 1828	No vote, defrayed from Woods and Forests Funds, under Treasury authority.	£. 35,264 - - 35,557 7 5	By the Office of Works.	3 per cent.

Prior to the year 1815, when the appointments of attached architects to the Board of Works first took place, and subsequently to the abolition of those appointments in 1832 up to the present time, when both the architectural and financial duties of the profession were undertaken by the several architects employed upon public works, the professional allowance has been invariably 5 per cent. upon the outlay. It was only during the existence of the appointments of attached architects to the Board of Works, when that Board undertook the financial part of an architect's duties, that the professional allowance was 3 per cent.

In illustration of this statement, it may be mentioned that, prior to 1832, the eminent architects, Sir John Soane, Mr. Nash, and Mr. Burton, carried into effect the following public buildings, not above alluded to—Houses of Parliament, Courts of Law, Insolvent Debtors' Court, Board of Trade, Foreign Office, Westminster Mews, New Storehouse for the Guards, St. James's Palace, Royal Mews, King's Stand, Ascot, and Lodges, Windsor Park,—for 3 per cent. on the outlay; the Board of Works undertaking all financial duties in respect to the same. Subsequently to the year 1832, and up to the present time, Sir John Soane, Mr. Nash, Mr. Burton, Sir Robert Smirke, Mr. Good, Mr. Wilkins, Mr. Poynter, Mr. Pennethorne, and Sir Charles Barry carried into effect the State Paper Office, Whitehall Chapel Restoration, Westminster Hall Restoration, Temporary Houses of Parliament, Chapel Royal, Courts of Law, Hyde Park Gateways, Brighton Pavilion, National Gallery, St. Katherine's Hospital, Regent's Park, the Quadrant Colonnade Works, the Ordnance Office, Pall Mall, the Board of Trade and Treasury Buildings, and Piccadilly Improvements, for 5 per cent. on the outlay, the several architects employed undertaking all architectural as well as financial duties.

From Sir *C. E. Trevelyan*, K.C.B., to Sir *Charles Barry*.

Sir, Treasury Chambers, 5 September 1854.

I AM commanded by the Lords Commissioners of Her Majesty's Treasury to acquaint you, with reference to your letter dated the 14th March last, in reply to the letter from this Board of the 8th February last, on the subject of your remuneration as architect of the New Houses of Parliament, that the First Commissioner of Works has been informed that the only parts of your statement which appear to my Lords to require confirmation, are :

1st. That great delays and extensive alterations have been made in the original plans, in consequence of the interference of Parliamentary Committees, and other authorities, by which the progress of the works has been retarded. But my Lords are of opinion that as, from these and other causes, the original contemplated expenditure has been greatly increased, the additional commission proposed to be paid to you on account of such increase must be regarded as a full recompense.

2d. The extra labour in re-designing, in some cases four times, certain portions of the work in consequence of the ever-varying directions from chiefs of departments. Upon this point my Lords are without sufficient information to form an opinion, and they have therefore requested the First Commissioner of Works to make such an investigation into this subject as will enable him to advise my Lords, whether, looking to the magnitude of the works, and to the increased expenditure resulting in great measure from the repeated alterations in the plans, and chiefly to the larger amount of the commission which will be paid in consequence by the plan of per-centage proposed in their Lordships' Minute of the 6th February, you have any just claim for extra remuneration, above the rate of commission fixed in the said Minute, in respect to any extra labour for such plans and designs.

And 3d. With reference to the employment of Mr. Pugin, it is stated by you that that gentleman was employed, not for the purpose of making designs, or assisting you in doing so, but in superintending the execution of designs made by you.

I am, &c.

(signed) *C. E. Trevelyan.*

From Sir *Charles Barry* to Sir *C. E. Trevelyan*, K.C.B.

Sir, Old Palace Yard, 18 September 1854.

I HAVE to acknowledge the receipt of your letter of the 5th instant, with reference to the statement made by me in a letter which I addressed to Mr. Wilson on the 14th March last, on the subject of my remuneration as the architect of the New Palace at Westminster.

In reply, I have to state that the adequacy or inadequacy of the remuneration therein proposed to me by the Lords Commissioners of Her Majesty's Treasury for the alterations made in the original plans, in consequence of the interference of Parliamentary Committees and other authorities, will depend upon the amount of commission finally awarded to me for my services, the ordinary commission being utterly inadequate to the extraordinary amount of labour bestowed upon the works in question.

As the statement of precedents, contained in my letter to Mr. Wilson of the 14th of March last, relative to the payments hitherto made to all architects who have been employed upon the public works of the country is not questioned, I presume that its accuracy is admitted.

I have, &c.

(signed) *Charles Barry.*

From

From Sir *C. E. Trevelyan*, K. C. B., to Sir *Charles Barry*.

Sir, Treasury Chambers, 2 October 1854.

I AM commanded by the Lords Commissioners of Her Majesty's Treasury to acquaint you, in reference to the concluding paragraph of your letter of the 18th ultimo, on the subject of your remuneration as architect of the New Palace at Westminster, that my Lords, in their communication to you of the 5th ultimo, purposely avoided entering into any questions raised in your former letter, other than those which they deemed material for the immediate object of the communication; and I have to state, that they wish it to be understood that they admit no part of your statement which infers a conclusion different to that at which their Lordships had arrived, and from which they have seen no reason whatever to depart.

I have to add, however, in reference to your application to the Chancellor of the Exchequer for a further advance of 5,000 *l.*, that my Lords are prepared to make the same, but on the distinct understanding that they do so in conformity with the principle of remuneration already laid down.

I am, &c.

(signed) *C. E. Trevelyan.*

From Sir *Charles Barry* to Sir *C. E. Trevelyan*, K. C. B.

Sir, Old Palace Yard, 12 October 1854.

I HAVE the honour to acknowledge the receipt of your letter of the 2d instant, in which you state that the Lords Commissioners of Her Majesty's Treasury admit no part of my statement of the 1st ultimo, which infers a conclusion different from that at which their Lordships had arrived; their Lordships, in their letter of the 5th ultimo, having purposely avoided entering into any question raised by me, other than those which they deemed material for the immediate object of the communication.

These questions, therefore, I understand to be in suspense, until the time shall arrive when it shall seem fit to their Lordships to enter upon them. I will only add that I shall then, as now, be ready to support any facts which I have advanced by due proof; and I trust, that the conclusions which I have ventured to draw will be fully borne out by the fair and legitimate reasoning whereby I have arrived at them.

In reference also to your intimation, that their Lordships are prepared to make me a further "advance of 5,000 *l.*, on the distinct understanding that they do so in conformity with the principle of remuneration already laid down," I presume I am to understand, that their Lordships desire not to be prejudiced by such payment in regard to the principles which they have laid down in their correspondence respecting the proper remuneration for my services as architect of the New Palace at Westminster. This advance, therefore, for which I beg you will convey my acknowledgement to their Lordships, I receive as on further account of my claims, without prejudice either to the views of their Lordships on the one hand, or to my own claims on the other; and as I have already received an order for the payment of it from the Commissioners of Works, I propose to avail myself of it accordingly.

I have, &c.

(signed) *Charles Barry.*

From *James Wilson*, Esq., M. P., to Sir *Charles Barry*.

Sir, Treasury Chambers, 30 October 1854.

The Lords Commissioners of Her Majesty's Treasury have had before them your further letter of the 12th instant, respecting the remuneration awarded to you for your services as architect of the New Palace at Westminster.

I am directed to acquaint you, that my Lords had hoped that the letters which have already been addressed to you had been sufficiently clear to have admitted of no misunderstanding, and that they therefore regret that, by your letter of the 12th instant, there are several points on which you appear to have misunderstood these communications. First, my Lords consider that there are no questions in suspense as to the principle upon which your remuneration is to be computed; on this point, the terms which have been communicated must be considered as conclusive, so far as their Lordships are concerned.

Second. The payment of 5,000 *l.*, ordered by the Minute of this Board of the 29th ultimo, was on the distinct understanding that it was made in conformity with that principle, and the terms used were not meant to imply, that in making the payment my Lords did not wish to be prejudiced in the position which they took, as you assume. My Lords must therefore regard the adoption of their letter of the 2d instant, and the acceptance of the payment therein ordered, as an admission of the principle they have laid down for their guidance.

I am, &c.
(signed) *James Wilson.*

From *J. M. White*, Esq., to the Treasury.

Sir, 10, Whitehall Place, 20 November 1854.

Acting as a friend on behalf of Sir Charles Barry, who, under the existing relations between himself and the Government, wishes to be relieved of the pain of all further discussion personally, or by letter, on the subject of his claims as the architect of the New Palace at Westminster, as more fully explained in his letter to you of the 10th instant, I have to reply to your letter to him of the 30th ultimo.

With respect to the 5,000 *l.* last offered by the Lords Commissioners of Her Majesty's Treasury on further account, and accepted by Sir Charles on the 19th ultimo, he and his friends, including myself, whom he consulted on the occasion, still consider that the construction he put on your letter of the 2d ultimo, was a fair and natural one, and that he was therefore fully entitled to avail himself of that offer, under the conditions prescribed in his letter to you of the 12th ultimo, in which conviction he felt himself confirmed by not receiving any objection on your part for an entire week prior to receiving the amount in question. He is glad, however, to find from the interview which I had with you on his behalf on the 13th instant, that notwithstanding his misapprehension of their Lordships' meaning, there is no intention to conclude him by his receipt of that sum, as if he were thereby held to have acquiesced in the view of their Lordships respecting the principle of remuneration which they had laid down for their guidance.

I have also communicated to him your statement that his explanation with regard to Mr. Pugin's employment is deemed to be satisfactory.

As my interview with you on the 12th ultimo was unfortunately interrupted just as you were about to enter on an explanation of the details of their Lordships' proposition, I have to request that you will be pleased to favour me at your earliest convenience with information upon two points, still reserved by their Lordships for further information from the Board of Works.

First, as to the numerous designs which have been made of almost every portion of the New Palace, under direction of the chiefs of the several departments of the business of Parliament, which have been rendered useless by subsequent orders, prior to the execution of the work; and

Second, as to the allowance for measuring up accounts, on which subject Sir Charles Barry is anxious to know whether the time which he has personally devoted to that service; his responsibility attendant upon it; and the unexampled trouble and difficulty which he has had in resisting successfully, and without litigation, extortionate demands to the extent of more than 80,000 *l.*, from which

which labour, anxiety, and responsibility, all architects who have hitherto been employed by the Government at a less commission than 5 per cent. have been wholly relieved, are points to be considered in that allowance.

On receipt of this information I shall be prepared to explain Sir Charles Barry's views upon the whole subject at issue between the Government and himself, and I trust I shall be enabled to propose such a settlement of it as will be satisfactory to their Lordships as well as to himself.

I have, &c.
(signed) *John Meadows White.*

From *J. M. White*, Esq., to *James Wilson*, Esq., M.P.

Sir, 31 March 1855.

I BEG to remind you that I am still without any reply to my letter of the 20th November last respecting Sir Charles Barry's claims. When I called at the Treasury at the close of the last year, to inquire the cause of the delay, I was informed that their Lordships had not received the requisite returns from the Office of Works to enable them to reply. I have recently ascertained that all the returns required of that office have been made some weeks since. I have to beg the favour of your reply without further delay, in order that Sir Charles Barry may clearly and fully understand the proposition made by the Treasury, particularly as to the amount of the allowance to be made to him for the measuring and making up the accounts of the works in the New Palace at Westminster, and the other points which their Lordships then reserved for further information.

I have, &c.
(signed) *J. M. White.*

From *J. M. White*, Esq., to *James Wilson*, Esq., M.P.

Sir, 10, Whitehall Place, 10 May 1855.

HAVING been given to understand that the claims of Sir Charles Barry have been under the consideration of the Treasury, and that a decision would shortly be come to upon them, I beg, on his behalf, again to request your attention to them, having regard to my letters of the 20th November and 31st March last, to neither of which have I yet been favoured with a reply.

I remain, &c.
(signed) *John Meadows White.*

From *G. Russell*, Esq., to *J. M. White*, Esq.

Sir, Treasury, 14 May 1855.

MR. WILSON will be glad to see you here on Wednesday next, at 12 o'clock, on the subject of Sir C. Barry's claim.

I am, &c.
(signed) *George Russell.*

From *G. Russell*, Esq., to *J. M. White*, Esq.

Dear Sir, Treasury, 23 May 1855.

MR. WILSON will be glad to see you to-morrow, Thursday, morning at half-past 11 o'clock.

I am, &c.
(signed) *George Russell.*

From *George Russell*, Esq., to *J. M. White*, Esq.

Dear Sir, Treasury, 24 May 1855.

Mr. Wilson wishes you to be good enough to bring with you, on Saturday, the letter of authority which Sir Charles Barry received from the Board of Works, as to the supply of furniture for Mr. Meeson's rooms.

I am, &c.
(signed) *George Russell.*

Paper handed to Mr. *Wilson* by Mr. *White* at Interview on Saturday, 26 May 1855.

T. W. Philipps, Esq., to Sir *Charles Barry*.

Sir, Office of Works, &c., 11 January 1853.

I am directed by the Commissioners of Her Majesty's Works, &c., to acknowledge the receipt of your letter of the 14th ultimo, transmitting a tracing showing the rooms above the Queen's Robing Room, in the New Palace at Westminster, proposed as a residence for Mr. Meeson, and requesting authority for the completion and appropriation of the rooms accordingly. And I am to inform you that the Board approve of such appropriation, and authorise you to proceed in making the rooms habitable, supplying the rooms with any surplus furniture which may be requisite beyond that at present possessed by Mr. Meeson, which he will be required to make available.

I am at the same time to desire that both the works and furniture may form the subject of accounts distinct from those of the works directly connected with the erection of the new buildings.

I am, &c.
(signed) *T. W. Philipps.*

Paper handed to Mr. *White* by Mr. *Wilson* at Interview on Saturday, 26 May 1855.

Past Accounts.

Commission on works to which commission is applicable, 3 per cent.
Amount to 2d October 1854; 1,506,845 *l.*
Commission for measurement on the cost of works to which measurement applies, 1 per cent.

These commissions to cover all questions of claim of every kind in respect to the Houses of Parliament.

Future Expenditure.

Commission on works performed, 3 per cent.
Commission for measurement on all expenditure to which measurement is applicable, 1 per cent.

Future.

To prevent all misunderstanding in future, Sir C. Barry is to order no furniture, &c., except under an authority through the Board of Works from the Treasury.

Treasury Chambers, 26 May 1855. Pr. *J. W.*

From

From *J. M. White*, Esq., to *James Wilson*, Esq., M. P.

Whitehall Place, 31 May 1855.

New Palace of Westminster.

Sir,

I HAVE submitted the last proposal which you made to me, without prejudice, which (in general terms) is limited to a commission of 3 per cent. for architectural duties, and 1 per cent. for measuring, &c., upon all past and future expenditure on the New Palace at Westminster, to Sir Charles Barry, who, as I led you to expect, is by no means satisfied with it.

The effect of this proposal involves a sacrifice of what may fairly be termed his legitimate claims, of no less than 40,000 *l.*, and although he is still disposed to make even a considerable sacrifice to release the Government from embarrassment, and bring his long-pending differences with it to a close, he cannot, in justice to himself and family, consent to make such an enormous sacrifice for that object, as that which is now required of him. He has always contested the right of the Government to prescribe to him the terms of his remuneration, the exercise of which right might, if pushed to its extreme limits, deprive him of all remuneration whatever, and he still thinks that the only fair and proper mode of adjusting his differences with the Government is by a reference of them to some independent, competent, and impartial tribunal.

In the course, however, which is being pursued in the present negotiation, he feels that he has a just right to complain of the ex-parte communications constantly taking place between the Board of Works and the Treasury, as self-constituted arbiter with respect to his claims, by which he is kept in ignorance of statements which may possibly be made to his prejudice, and is unable to judge of the grounds upon which the several proposals made to him have been based.

Before, therefore, giving any answer to your last proposal, I have to request, on his behalf, that he should be furnished with copies of all reports, statements, and communications made by the Board of Works to the Treasury on the subject of his claims, in order that he may have the opportunity of replying to them, if necessary, and thereby prevent a judgment on his case being formed by the Government upon ex-parte evidence. He feels the more impressed with the importance of making this request, in consequence of what has transpired in our recent interviews with respect to Mr. Meeson, the engineer in charge of the New Palace, wherein the Treasury has evidently received an erroneous impression from the documents in question.

Upon the receipt of these documents he will lose no time in replying to them, if necessary, and in making such a proposal for a final settlement as he trusts may be acceptable to the Government.

I remain, &c.

(signed) *John Meadows White.*

From *J. M. White*, Esq., to *James Wilson*, Esq., M. P.

10, Whitehall Place, 20 June 1855.

Sir, *Sir Charles Barry's Claims.*

AS MORE than a fortnight has elapsed since I requested to be furnished with copies of reports, statements, and communications made by the Board of Works to the Treasury on the subject of these claims, in order that Sir C. Barry might have an opportunity of replying to them, and thereby prevent the Government from forming an ex-parte judgment on the case, I shall be obliged for a reply, that it may, if possible, be disposed of whilst the discussions on it are so recent.

I remain, &c.

(signed) *John Meadows White.*

From *George Russell*, Esq., to *J. M. White*, Esq.

Dear Sir, Treasury, 28 June 1855.

Mr. Wilson will be glad to see you if you can come over to him at once.

I am, &c.
(signed) *George Russell.*

From *J. M. White*, Esq., to *James Wilson*, Esq., M.P.

10, Whitehall Place, 14 July 1855.

Sir Charles Barry's Claims.

Sir,

Owing to Sir Charles's absence in Paris, I have not been able to obtain his final reply on the subject of these claims till this morning. I explained the purport of my interview with you last Saturday, when you stated that your offer was limited to the written paper which you read to me, and of which you had previously furnished me with a copy. The terms of this paper are as follows:

"Past Accounts.

"Commission on works to which commission is applicable, 3 per cent.
"Amount to 2d October 1854; 1,506,845 *l.*
"Commission for measurement on the cost of works to which measurement applies, 1 per cent.

"These Commissions to cover all questions of claims of any kind in respect to the Houses of Parliament.

"Future Expenditure.

"Commission on works performed, 3 per cent.
"Commission for measurement on all expenditure to which measurement is applicable, 1 per cent.

"Treasury, 26 May 1855."

"Future.

This was, of course, acceded to. *J. M. W.*

"To prevent misunderstanding in future, Sir C. Barry is to order no furniture, &c., except under an authority through the Board of Works from the Treasury."

To these terms I objected that they did not cover a very large amount of services relating to the Houses of Parliament, but not leading to expenditure; and further, there was another claim for interest on outlay, and on deferred payments, and generally, assuming the rates of commission were of the amounts offered by you, I considered that they ought to be on the amount expended, past and future. To your remark, "that the claim for extra services could not be of large amount, and hence you considered it was covered by the commission offered," and that the claim for interest you could not admit in any way, I replied, 1st, that the services were very considerable; in corroboration of which I now beg to forward a rough statement of them. And I feel I am justified in adhering to this part of the claim, which I fully believe would extend to a sum of at least 10,000 *l.* For you will have the goodness to bear in mind, that these claims run over nearly 20 years; that they have been the subject of inquiry by no less than seven Committees of the House of Commons, besides two official references relating to Dr. Reid's plans of ventilation (exclusive of that relating to his final claims, which has been duly met), and that in every case Sir C. Barry has acted with full sanction and authority.

Paper (A).

I put forward this claim, therefore, with perfect confidence, because had it been an ordinary case between an independent architect and an ordinary employer, the claim could be supported fully on a *quantum meruit;* and why an independent architect, like Sir C. Barry, should not have at least the same payment from the Government, I am wholly at a loss to understand.

The

The claim for interest, if worked out in detail, would amount at least to as much as the other class of claims. You will recollect that I pointed out, in reference to the 25,000 *l.* alluded to in Lord Duncannon's offer, Sir Charles, instead of being paid in six years as proposed, was not paid in twelve; and even in the measuring, to which your offer of 1 per cent. extends, he is actually in advance from 11,000 *l.* to 12,000 *l.*; and his other outlay, especially in more remote years, has been in large advance from time to time, independently of the balance now due to him, and the sacrifice he is willing to make if a final settlement be now made. It is true that advances are almost incidental to cases of this kind, and that, if disputes arise, it is an inconvenience which must often be shared between the disputing parties; but such incidents are covered and the inconvenience met by adhering to the customary rules and amount of remuneration, which in works like these is 5 per cent., as claimed by Sir C. Barry. That amount being departed from, the present claim has a substance and a reality about it calling for full and fair consideration from the Government. And finally, on the main point of the commission, I must again advert to the following facts:

1st. That the Board of Woods and Works in the first instance themselves added 5 per cent. as due to the architect. This had all the effect of a legal contract, if not disturbed by subsequent proceedings.

2d. Lord Duncannon's offer of 25,000 *l.* was made on the original estimate, coupled with the condition of the work being completed in six years, and other terms, not one of which has been kept. The works have nearly reached three times their amount, and have extended over three times the stipulated period. The offer itself was also acceded to under protest, and in fact has never had a legal existence.

3d. Hence, Sir C. Barry has either a right to fall back on the original estimate, or on the custom. Both of these are 5 per cent., including the measuring and taking out quantities; and by way of illustration, I have already referred to the British Museum and to Dover Harbour; the latter being mere plummet and line work, and sinking square blocks of stone, whilst Sir Charles has in many cases to make, it may be, even 1,000 working drawings for parts of the vast and elaborate work he has in hand.

But, as acting on his behalf with a view to a settlement, and not a perpetuation of these disputed claims, I now beg to offer as a counter proposition to your own:—

1st. To accept 3 per cent. as architect's commission on all certified works, taking the present amount as stated in your offer.

2d. To accept 1 per cent. for quantities and measurement on the like amount.

3d. The same commissions respectively on all future certified works.

4th. To refer the claims for extra works to some eminent person, who can hear such evidence as either the Government or Sir Charles may adduce in support of their respective views.

5th. The same referee to decide the question of interest; or

6th. A specific sum to be at once received as a closing of all claims for such services, and interest to the present day.

As to the referee, I would name by way of illustration Sir John Patteson, Sir Edward Ryan, or Mr. J. Lefevre, or any other of like standing.

These points I have severed in order as far as possible to meet the views already discussed in personal conference. But as a whole, I can only say, in conclusion, as I have said before, that Sir C. Barry is willing to submit the whole question to a reference of this kind, and to abide the result. He is prepared to justify his claim to 5 per cent. by his original engagement, and the custom; to vouch for all he has done by showing he has never acted without full authority; and, if anything be needed to support his views, he finds it in the attack which has been made on him, and the way in which, up to the present discussion, what he believes to have been his just and reasonable claims have been resisted by the successive Governments with whom he has had to deal.

I will wait on you for your reply to this suggestion, and beg to subscribe myself,

Your, &c.
(signed) *John Meadows White.*

(A.)

New Palace at Westminster, 14 July 1855.

SPECIAL AND EXTRAORDINARY SERVICES.

Public Records.

FOR services connected with the Records of the United Kingdom, preparing numerous plans and reports, with reference to their deposit in the Victoria Tower and the roofs of the New Palace. Superintending the erection of temporary presses and other arrangements to exemplify the several propositions made on the subject. Interviews and correspondence with the Record Commission, the Commissioners of Works, Dr. Reid and others, and expenses incurred.

Fine Arts Commission, with reference to the New Palace.

For services connected with the Fine Art Commission appointed to determine and superintend the decoration of the New Palace. Complete set of plans for the guidance of the Commission as to the situations available and appropriate for Fine Art decoration. Attendances upon meetings of the Commission for the discussion of schemes of decoration, &c. Detailed reports accompanied with plans for decorations generally, and especially for statues proposed to be erected in the New Palace to great and distinguished characters. Interviews and correspondence with the Secretary, as well as with artists and others, and expenses incurred.

As to Warming, Lighting, and Ventilating.

For ten years' services in conjunction with Dr. Reid, relative to the warming, ventilating, lighting, and abstracting of smoke, nearly the whole of which period was occupied in communications of a controversial character, in consequence of the reckless and impracticable suggestions of Dr. Reid, which, if fully acquiesced in, would have destroyed the stability, convenience, and character of the building. For hundreds of drawings bearing upon schemes which have been laid aside; numberless reports and statements to the Office of Works, interviews with the Board, with Dr. Reid, and others. Attending two official inquiries into Dr. Reid's system of warming, ventilating, lighting, and fire-proofing, and into his alleged grievances. For plans and other documents required by the referees. Attendances to give evidence, interviews, correspondence, and expenses incurred.

Parliamentary Business.

Voluminous and elaborate returns to Parliament. Attendances upon seven Parliamentary Committees of Inquiry. Plans, diagrams, and other data for the elucidation of evidence. Interviews and correspondence with Chairmen of Committees, Secretaries, Members of the Government, and others, with reference to these inquiries, as well as the debates and questions in Parliament consequent thereon, and expenses incurred.

Warming, Ventilating, and Lighting Operations.

For taking charge of the warming, ventilating, and lighting operations of the entire building, with the exception of the House of Commons, and superintending these operations for a period of five years and a half, which duties are now performed by Messrs. Meeson & Gurney at high salaries, and expenses incurred.

Wood and Stone Carving Works.

Personal direction for 14 years of the workmen, and the payment of them in the wood and stone carving departments, by which an enormous saving of contractors' charges and profits has been effected in the cost of the decoration of the New Palace.

Purchase of Stock on behalf of Government.

Negotiating and effecting the purchase of a large stock of seasoned wainscot for the carvers, &c., by which a saving has been effected of nearly 5,000 *l.*

Procuration of Specimen Casts.

Procuring casts from the best examples of mediæval carving in this country as well as abroad, for the instruction and guidance of the wood and stone carvers employed upon the New Palace.

Extra Designs.

Designing and re-designing every department of the building according to the ever-varying orders of Committees, Commissioners, and heads of departments, in some instances, such as the front towards Old Palace Yard, no less than four times before the works were put in hand, by which the original plans, forming the basis of the original estimate, have been rendered useless.

Miscellaneous Services.

Resisting claims and legal proceedings of Messrs. Bex, Stenitz, Nichol, Bramah, and Cochrane, Messrs. Grissell, and others; preparing all requisite documents for the purpose; attendances upon Crown solicitors, and legal investigations; and expenses incurred during a period of 20 years.

From

From *G. Russell*, Esq., to *J. M. White*, Esq.

Dear Sir, Treasury, 21 July 1855.

Mr. Wilson will be glad to see you here to-day, at two o'clock.

I am, &c.
(signed) *George Russell.*

From *George Russell*, Esq., to *J. M. White*, Esq.

Dear Sir, Treasury, 23 July 1855.

Mr. Wilson directs me to inform you, that as some of the claims of Sir Charles Barry, last discussed, are new, he has thought it fair to him to institute some inquiry into them, the result of which he hopes to know by Wednesday.

I am, &c.
(signed) *George Russell.*

From *J. M. White*, Esq., to *James Wilson*, Esq., M. P.

10, Whitehall Place, 31 July 1855.

Sir Charles Barry's Claim.

Sir,

I saw Sir Charles Barry yesterday in conference on the subject of the letter of the 14th instant, which I addressed to you during his absence in Paris, and which he fully affirms.

I explained to him the purport of my interview with you on the 21st instant, when you declined to entertain his claims in respect of services, &c., not covered by a commission; or the alternative offer, to accept the commissions suggested in the terms discussed between us, and to submit the other claims to a referee; or to have a general reference of the whole question.

I also explained that you had offered to wait for a final reply till Saturday, the 28th (afterwards enlarged to the 30th, yesterday, to allow of my seeing him on his expected return from Paris); and in default of your offer of the 26th May last being accepted, you would consider the negotiation at an end, and prepare a Treasury Minute, setting forth what the Government were prepared to do, and leaving Sir Charles Barry to take such steps as he might think proper in the matter.

I further submitted to him Mr. Russell's letter of the 23d (received by me on the 25th instant), stating that as some of the claims were new to you, you had thought it fair to him to institute some inquiry into them, the result of which you hoped to have by Wednesday last.

Not having received any further communication from you, and the time which you prescribed for Sir Charles's reply to your proposals having elapsed, I am now required by him to say, that although, by the advice of his friends, he had made up his mind to the great sacrifice involved in acceding to the principle of your offer, for the purpose, amongst other considerations, of relieving the Government from all embarrassment on the subject, and also obtaining an immediate settlement, and thus avoiding the delays, anxieties, and disadvantages attendant upon a legal controversy with a Government; yet as his just claims for extra and special services, &c., during the whole period of his employment, have not been acceded to, he cannot, having due regard to his position and to the interests of his family, accept the proposals which you have submitted as the definitive terms on which the Government is prepared to come to a settlement with him.

Sir Charles considers, therefore, that he has no other course to pursue than, on his part, to withdraw his assent to any reduced commission, and to request that the whole question at issue between himself and the Government may at once become the subject of a reference, being the remaining alternative proposed in my letter to you of the 14th instant.

I am &c.
(signed) *John Meadows White.*

From *J. M. White*, Esq., to *James Wilson*, Esq., M. P.

10, Whitehall Place, 22 August 1855.

Sir Charles Barry's Claims.

Sir,

Now that the pressure of Parliamentary business is removed, I shall be obliged by a reply to the offer of a general reference of all matters in dispute, contained in my letter of the 31st ultimo.

I shall be quite ready on Sir Charles Barry's behalf to go into the matter in detail, so that a conclusion could be arrived at before Parliament meets again, should the reference be acceded to.

Should it be declined, no other course seems open except that of Sir Charles falling back on his original claim, the custom of his profession, and the general equities of the case, which appear to me, if the case be taken up strictly, to be wholly in his favour.

I have, &c.
(signed) *John Meadows White.*

From *George Russell*, Esq., to *J. M. White*, Esq.

Dear Sir, Treasury, 28 November 1855.

Mr. Wilson will be glad to see you here to-morrow, at 12 o'clock.

I am, &c.
(signed) *George Russell.*

From *J. M. White*, Esq., to *George Russell*, Esq.

10, Whitehall Place, 30 November 1855.

Sir C. Barry's Claim.

Dear Sir,

I shall be obliged if Mr. Wilson would furnish me with a copy of the Return of the Board of Works of the expenditure incurred up to its date, on which his offer of 4 per cent. will operate, for the purpose of examination, and to ensure accuracy in considering its effect.

I am, &c.
(signed) *John Meadows White.*

From *George Russell*, Esq., to *J. M. White*, Esq.

My dear Sir, Treasury, 1 December 1855.

If you will be good enough to call here this afternoon about 4 o'clock. Mr. Wilson will see you on the subject of your note to me of yesterday.

I am, &c.
(signed) *George Russell.*

From *J. M. White*, Esq., to *James Wilson*, Esq., M. P.

10, Whitehall Place, 12 December 1855.

Sir Charles Barry's Claims.

Sir,

I have communicated to Sir Charles Barry the purport of the interviews with you on the 29th ult. and 1st instant, and I now beg to enclose a copy of his own comments for your consideration.

See Papers (A.) and (B.)

In fact, when I offered on his behalf, in the letter I addressed to you on the 14th July, to leave every point to a general reference, an offer which was just to all parties, and embraced every point in dispute, I considered that my duty as interposing on behalf of Sir Charles Barry was at an end; and the fact that I was

I was never favoured with a reply to that letter, though I subsequently pressed for one, confirmed me in what I thought. But your re-opening the discussion by referring to the extra claims, of which one before rejected is now admitted to be valid, has induced me to submit to Sir Charles Barry the expediency of putting his own views before you so categorically as to enable you not merely to see the grounds on which his claims rest, but to challenge the opinions of any authority whom you may see fit to consult, should they differ from his own.

For my own part, if I could persuade myself that the rejection of Sir Charles Barry's claims, as proposed by you, were in any way justified by a fair and reasonable view of their soundness, or if justice were not really, and indeed only, attainable by a reference when there is a dispute and both parties desire only what is just, I would gladly continue at the disposal of Sir Charles Barry in this matter; but as it is, I have deemed it better that he should submit his replies to your objections in his own words, accompanied by an offer of reference of any disputed points; and if this be not acceptable, I am sure he may fearlessly appeal to Parliament, or to such means of redress as are open to parties having just claims against the Government which they cannot get recognised in the ordinary way.

I, of course, hold myself open to receive any reply to the present communication, or to wait upon you on an intimation of your desire that I should do so.

I remain, &c.
(signed) *John Meadows White.*

(A.)

Old Palace Yard, 12 December 1855.

New Palace, Westminster.

Dear Mr. White,

In order to obtain an immediate settlement of my remuneration, and thereby avoid all further misunderstanding, which, to me, has been a source of great anxiety and hardship for many years, I am willing to forego a considerable amount of the claims which I consider to be justly due to me, and therefore to accept conditionally Mr. Wilson's last proposition, which I understand to be, 4 per cent. upon the cost of all works executed, and to be executed, at the New Palace at Westminster, from my designs and instructions, such per-centage to include the measuring, valuing, and making up of the accounts. With reference to the claim for the trying and anxious services which I have rendered in respect of the warming, ventilating, and lighting arrangements and operations for more than ten years, which Mr. Wilson states that Lord Palmerston agrees with him in thinking it just to admit, as not being covered by an architect's commission, I am willing to accept the sum of 500 *l.* per annum for the period mentioned, being about a fourth of the expense now incurred for a part only of the same service.

My acceptance, however, of Mr. Wilson's proposal must be understood to be only upon conditions, that such of the other extra services which I have rendered, and which are enumerated, with comments, in the accompanying paper, as can be proved to have been performed upon due authority, and are not covered by an architect's commission, shall be referred to arbitration.

As I am thoroughly satisfied that neither Lord Palmerston nor Mr. Wilson can wish to deprive me of all remuneration whatever for important services that have really been rendered to the public, I trust that the reasonable proposition which I now make in respect of them will be readily complied with. If, however, the Government should prefer to avoid the delay and uncertainty of an arbitration, I would at once agree to accept the sum of 5,000 *l.* in liquidation of my claims for the services in question, which I feel assured would be far short of the amount that would be awarded to me under an arbitration.

I remain, &c.
J. M. White, Esq. (signed) *Charles Barry.*

(B.)

NEW PALACE, WESTMINSTER.

EXTRA SERVICES of the ARCHITECT, with OBJECTIONS by Mr. *Wilson*, and REPLIES thereto by Sir *C. Barry*.

ITEMS.	Mr. Wilson's Objections, as stated by Mr. White.	Sir C. Barry's Replies.
Public Records. For miscellaneous services connected with the Records of the United Kingdom. Preparing numerous plans and reports with reference to their deposit in the Victoria Tower, and the roofs of the New Palace. Superintending the erection of temporary presses and other arrangements to exemplify the several propositions made on the subject. Interviews and correspondence with the Record Commission, the Commissioners of Works, Dr. Reid and others, and expenses incurred.	These services are considered to have been performed without being required or sanctioned by competent authority, and that in any case the commission on the outlay upon this part of the works ought to cover such an item.	These services were required and officially sanctioned by the Board of Works and the Record Commission. They have not led to any extra outlay upon the building, and, therefore, no charge can be made for them by commission.
Fine Arts Commission. For miscellaneous services connected with the Fine Art Commission, appointed to determine and superintend the decoration of the New Palace. Complete set of plans for the guidance of the Commission as to the situations available and appropriate for Fine Art decoration. Attendances upon the meetings of the Commission for the discussion of schemes of decoration, &c. Detailed reports accompanied with plans for decorations generally, and especially for statues proposed to be erected in the New Palace to distinguished public men. Interviews and correspondence with the Secretary, as well as with artists and others, and expenses incurred.	It is considered that this Commission ought to pay for any services rendered at their instance if not covered by the commission on the works, the cost of which was probably enhanced by their suggestions.	As this is a Royal Commission I assume that all expenses incurred by it are defrayed by the Government. The services in question have occupied much time and thought, and expenses have been incurred. They have not led to any expenditure upon works under Sir C. Barry's control, and cannot therefore be covered by any commission due to him.
Parliamentary Business. Voluminous and elaborate returns to Parliament. Attendances upon seven Parliamentary Committees of Inquiry. Plans, diagrams, and other data for the elucidation of evidence. Interviews and correspondence with Chairmen of Committees, Secretaries, Members of the Government, and others, with reference to these inquiries. Attendances to afford information upon debates and questions in Parliament consequent thereon, and expenses incurred.	This item is conceived to be covered by the commission, the inquiries made being naturally incidental to the position of the architect.	These services have been attended with great labour, and have consumed an enormous amount of time. They are such as an architect is never called upon to perform in his ordinary practice, and cannot be covered by commission, as they do not lead to expenditure upon the works of the building.
Wood and Stone Carving Works. Personal direction for 14 years of the workmen, and the payment of them in the wood and stone carving departments, by which an enormous saving of contractors' charges and profits have been effected in the cost of the decorations of the New Palace.	Considered to be incidental to the office of an architect, and covered by the commission, which was, no doubt, increased by these works.	Such a service as this is not certainly incidental to the office of an architect, and is entirely optional with him, to undertake or not, as he pleases. With a view, however, to avoid the extravagant demands commonly made by builders for ornamental works, whose value is a matter of opinion only, and which demands can seldom be resisted successfully, Sir Charles Barry undertook, with the sanction of the Board of Works, to perform all the duties incidental to a contractor with respect to the works in question, which he has now done for above 14 years, whereby a contractor's profit and all over-charges for the work executed have been saved to the country.

ITEMS.	Mr. Wilson's Objections, as stated by Mr. White.	Sir C. Barry's Replies.
Purchase of Stock on behalf of Government.		
Negotiating and effecting the purchase of a large stock of seasoned wainscot for the carvers, &c., by which a saving has been effected of nearly 5,000 *l.*	The same objection as to the last item.	The same observations apply to this item as to the last.
Collection of Specimen Casts.		
Procuring casts from the best examples of Mediæval carving in this country, as well as abroad, for the instruction and guidance of the wood and stone carvers employed upon the New Palace.	The same objection as to the last item.	This is a service performed by order of the Board of Works; it is certainly not incidental to an architect's ordinary duties, and does not lead to expenditure in works upon which he is entitled to commission. The result of his labours in this instance is the formation of a Mediæval Museum of great value, intended to be deposited in the National Collection of Antiquities in the British Museum, or elsewhere.
Extra Designs.		
Designing and re-designing every department of the building according to the ever-varying orders of Committees, Commissioners, and Heads of Departments, in some instances, such as the front towards Old Palace Yard, no less than four times, before the works were put in hand; by which the original plans forming the basis of the original estimate have been set aside and rendered useless.	Not considered to be extra, as Mr. Wilson conceives that an architect's duty includes matters of this kind, leading as they generally do to increased expenditure.	The numerous designs here alluded to have been prepared by authority, and have all been laid aside. They have not consequently led to increased expenditure. An architect is entitled to his accustomed commission for the one design adopted by his employer, and for his service in carrying that design into effect. For any further designs which he may be called upon to make, owing either to the caprice or vacillation of his employer, he is undoubtedly entitled to be paid; otherwise, with a fixed remuneration, as assumed by Mr. Wilson, there might be no limit to his labours, which would be both unreasonable and unjust.
Miscellaneous Services.		
Resisting claims and legal proceedings of Messrs. Bex, Stenitz, Nichol, Bramah, and Cochrane, Messrs. Grissell, and others; preparing all requisite documents for the purpose; attendances upon Crown solicitors and legal investigations, and expenses incurred during a period of 20 years.	The same objection as to the last item.	There can be no doubt that these services form no part of an architect's duties, and they are invariably paid for by a specific remuneration according to the nature and extent of them.

(signed) *Charles Barry*

12 December 1855.

COPY of TREASURY MINUTE, dated 29th January 1856.

MY Lords advert to their Minute of the 6th February 1854, in reference to the claims of Sir Charles Barry, as architect of the new Houses of Parliament.

By that Minute my Lords arrived at the opinion that a commission of 3 per cent. upon the cost of the building already incurred would be a fair and liberal remuneration to Sir Charles Barry, and that the same rate of commission should be allowed on the future expenditure.

My Lords, however, reserved for further consideration a claim which had been made for the payment for certain services performed by the late Mr. Pugin, upon which, as well as with regard to the question of measurement of works, past and future, my Lords called for a Report from the Board of Works. My Lords also requested to be informed of the exact cost of the buildings up to the latest date then ascertainable, and of the amount of moneys which from time to time had been paid to Sir Charles Barry.

From the Report of the Board of Works it appears that up to the 2d of October 1853 the cost of the building amounted to 1,506,845 *l.* 10 *s.*, but with regard to which the Board of Works reports that works to the amount of 14,439 *l.* were not strictly subject to commission. They also report, that up to that date Sir Charles Barry had received payments on account of commission, amounting in all to 44,735 *l.* 3 *s.* 9 *d.*

With regard to measurements, it appears by the same Report that Sir Charles Barry had paid out of pocket the sum of 11,457 *l.* 18 *s.* 10 *d.* for that work, and that he had employed, in a portion of that duty, officers of the Board of Works, but who had been paid extra for such services. From explanations made, my Lords arrived at the conclusion that the moneys paid to Mr. Pugin should be allowed as extras. The Report of the Board of Works referred to, dated the 22d January 1855, however, brought before this Board several new claims upon the part of Sir Charles Barry for extra remuneration over and above his commission, but which appeared to my Lords to be generally of a nature which were covered by the commission of 3 per cent. upon the outlay.

Mr. Wilson now states to the Board that, at the instance of Sir Charles Barry, Mr. Meadows White, as his friend, sought several interviews with him for the purpose of endeavouring to come to a settlement in respect to the numerous questions in dispute.

A list of Sir Charles Barry's claims for extra payment was put in by Mr. White, and consisted of:—

1. Services for plans in connexion with some contemplated arrangements in the new building for the deposit of Public Records.
2. Services in assisting and advising the Fine Arts Commission in respect to arrangements to be made in the Houses of Parliament.
3. Services in respect to warming and ventilating the Houses of Parliament.
4. Returns to Parliament and attendance on Parliamentary Committees.
5. Other services in respect to warming and ventilating.
6. For directions to workmen, &c. in the wood and stone carving departments.
7. For purchase of stock on behalf of Government.
8. For procuring casts from the best examples of Mediæval carving, &c.
9. For extra designs after the original plans were made.
10. For miscellaneous services, resisting unfair claims of contractors, &c.

It appears to my Lords, that with the exception of any charge which Sir Charles Barry may be able to show he is entitled to for conducting the ventilation and lighting of the Houses of Parliament, all the other charges were fairly to be included in the commission of the architect.

Looking, however, at the question as a whole, and desirous to put an end to these long disputed points, and after having consulted the Board of Works, the following offer was made to Mr. White, as acting for Sir C. Barry, on the 26th of May last, with a view finally to settle all questions as to commission, measurement, and all other claims, up to the 2d of October 1853, to which date the closed accounts extended.

1st. That a commission of three per cent. should be allowed on the entire outlay of 1,506,845 *l.*, up to the 2d of October 1853.

2d. That a remuneration for measurement upon the whole of the works included in that outlay should be paid at the rate of one per cent.

3d. That these commissions should cover all demands of every kind whatsoever for the past, the services for warming, lighting, and ventilating alone excepted, which should be dealt with separately, and upon their own merits.

4th. That the remuneration of Sir Charles Barry for the future should be fixed at .

Three per cent. commission on the outlay as architect, and one per cent. for measurement upon all works to which measurement applies; and that no furniture, &c. should in future be furnished by Sir C. Barry except by the special order of the Treasury.

After numerous further interviews and discussions with Mr. White, that gentleman, on the part of Sir Charles Barry, declined the terms of settlement thus offered, and pressed again the claims for the extra services performed.

My

My Lords having again referred Sir C. Barry's claims for a report to the Board of Works, and having very carefully reviewed the whole case, continue to be of opinion that the terms herein stated are not only fair, but liberal; that they include all remuneration to which Sir C. Barry is justly entitled for the services he has performed; and that their Lordships could not extend the same consistently with their duty to the public.

Considering, moreover, that this matter has gone on for nearly 20 years without any distinct understanding being arrived at, notwithstanding the efforts of every successive Board of Treasury to do so, my Lords are of opinion that it is inconsistent with the public interests that it should be any longer delayed; and they therefore, as far as they are concerned, must record these terms as their final decision upon the questions at issue. They are pleased, consequently, to direct that no further payment be made on account until a final settlement of the past, and an agreement as to the future, are concluded.

Let a copy of this Minute be forwarded to Sir Charles Barry, and to the Board of Works.

From Sir *Charles Barry* to *James Wilson*, Esq., M.P.

Sir, Old Palace Yard, 9 February 1856.

I HAVE to acknowledge the receipt of your letter of the 5th instant, enclosing copy of a Minute of the Lords Commissioners of Her Majesty's Treasury, dated the 29th ultimo, on the subject of my claims as the architect of the New Palace at Westminster.

As there are some passages in that Minute that appear to be founded upon a misapprehension of what has passed, I am anxious to call your attention to several of the explanations which I have already given in my letters and communications on the subject:

1st. With respect to the employment of the late Mr. Pugin, I have already stated, with reference to a claim made by their Lordships for a set-off on my commission for moneys paid to him, that he was not employed upon any duties that devolve upon me as the architect of the New Palace, inasmuch as all designs for that building have emanated from myself, but as the superintendent of the wood-carving department, in carrying my designs into effect, to which office he was appointed by the Government at a salary.

2dly. With reference to the measurement of the work, I have already explained, that a portion of it was executed by my own clerks of works, and not, as stated in their Lordships' Minute, by the officers of the Board of Works.

3dly. That as the mention which is made of the furniture in the Minute may possibly lead to an inference that I have been in the habit of supplying furniture to the New Palace, I am anxious to repeat, that I have only been employed to make the designs for it, see to the proper execution of the contract, and check the accounts.

With reference to the remark in their Lordships' Minute, as to the duration of the misunderstanding between myself and the Government in respect of my claims, I have to observe, that one of my greatest hardships has been the constant delays and postponements which have occurred in the consideration of my case; and that during a period of more than 15 years I have made every effort in my power to effect a settlement upon fair and honourable terms, and have constantly urged, without effect, the propriety of a reference by which I should have been perfectly willing to abide.

Lastly. I would beg to notice an omission in their Lordships' Minute on the subject of Mr. White's reply to their last proposal on the 12th December last, and to observe, that he did not then decline to accept the principle of it, but, on the contrary, accepted it, reserving only a question of a portion of the extra services to which that principle does not apply, and for which he proposed a fixed sum, or a reference to arbitration, to which proposal no official answer has yet been returned.

With respect to the decision recorded in their Lordships' Minute, I regret extremely that I cannot consider it to be worthy of the character which their Lordships assign to it, as being either fair or liberal, for the following reasons:

1st. Because it appears to be founded upon reports and statements upon which I have not been furnished with the means of making any reply or observations.

2dly. Because the remuneration proposed is at variance with the long-established custom of my profession, and is far from adequate, when the elaboration of the work upon which I am engaged, and the extraordinary difficulties and disadvantages which have attended its progress, are duly considered.

3dly. Because it is also at variance with all past and present practice in respect of the rate of professional remuneration paid by the Government for all other architectural and engineering works of the country.

4thly. Because it deprives me, not only of all remuneration whatever for many extra services, forming no part of my duties as the architect of the New Palace at Westminster, but also of the repayment of a considerable sum of money which I have disbursed on account of them; and,

Lastly. Because the several questions at issue, both those which are strictly professional as well as those which are of a legal character, can only, in my opinion, be fairly solved upon evidence before an arbitrator of high standing, such as those whom I have ventured to propose for the purpose, by whose decision I should be perfectly willing to abide.

I remain, &c.
(signed) *Charles Barry.*

From Sir *Charles Barry* to *James Wilson*, Esq., M. P.

Sir, Old Palace Yard, 18 February 1856.

I ENCLOSE copy of a letter which I have just received from Sir Benjamin Hall, with reference to an application which I have made at the Board of Works, according to the directions contained in your letter to Mr. White of the 11th instant, respecting the further information which I require with reference to the proposal of the Treasury for the liquidation of my claims as the architect of the New Palace at Westminster, and I have to request your further directions thereon.

I am, &c.
(signed) *C. Barry.*

From Sir *B. Hall* to Sir *Charles Barry.*

Office of Works, &c.
Dear Sir Charles Barry, 18 February 1856.

THE letter which you showed to me is merely a communication from Mr. Wilson to Mr. White. Mr. Wilson says you may put yourself in communication with the Board of Works upon the very difficult subject contained therein. But I should much prefer receiving instructions from the Lords Commissioners of Her Majesty's Treasury before I act, particularly so as their Lordships have sent me for my directions copy of a Minute, which has been forwarded to yourself, and also laid before Parliament.

If you think proper you may communicate this to the Treasury, and I will immediately attend to any instructions I may receive from that department. But I may as well state at once that I cannot give you more, and perhaps not so much information as you can receive from the Treasury, for your case has been decided there, and I have not any documents of which copies have not been sent to the Treasury.

Yours, &c.
(signed) *B. Hall.*

From *James Wilson*, Esq., M.P., to Sir *Charles Barry*.

Sir, Treasury Chambers, 19 February 1856.

I AM directed by the Lords Commissioners of Her Majesty's Treasury to acquaint you that the First Commissioner of Works has been requested to communicate with you upon two points which were left undetermined by their Lordships' Minute of the 29th ultimo on the subject of your claims ; viz.,

The amount of remuneration which should be allowed to you for services rendered in the warming, lighting, and ventilating arrangements ; and

The works upon which you should hereafter be allowed the commission of one per cent. for measuring.

I am, &c.
(signed) *James Wilson.*

NEW PALACE (WESTMINSTER).

CORRESPONDENCE between the Treasury and Sir *C. Barry*, and Mr. *White* on his behalf, respecting the REMUNERATION of the ARCHITECT of the NEW PALACE at WESTMINSTER up to the present Time (in continuation of Parliamentary Paper, No. 491, of Session 1849).

(*Mr. Tite.*)

Ordered, by The House of Commons, *to be Printed*,
1 *April* 1856.

Under 4 *oz.*

NEW PALACE AT WESTMINSTER.

RETURN to an Order of the Honourable The House of Commons, dated 18 July 1856;—*for*,

COPY "of a further TREASURY MINUTE, dated the 4th day of July 1856, relative to the Amount of Remuneration to be allowed to Sir *Charles Barry*, for his Services as Architect of the NEW PALACE at *Westminster*."

COPY of TREASURY MINUTE, dated 4th July 1856.

6084. READ Report from the First Commissioner of Works, dated 11 April 1856, on the two points left undetermined by the Treasury Minute of the 29th January last, with respect to the amount of remuneration to be allowed to Sir C. Barry for his services as architect of the New Palace at Westminster, viz.:

1. The amount of remuneration to Sir C. Barry for services rendered in the warming, lighting and ventilating arrangements connected with the New Palace, and,—

2. The works upon which he should hereafter be allowed the commission of 1 per cent. for measuring.

10566. Read also letter from Sir Charles Barry, dated 23 June 1856, requesting to be informed whether the Lords of the Treasury are disposed (in consequence of the representations subsequently made to them) to reconsider the offer made to him by the Minute of 29th January last, particularly as regards the extra services not yet recognised or covered by the commission proposed; or, whether they are inclined to accede to a reference upon the question at issue.

Mr. Wilson informs the Board that, since the date of their Lordships' Minute of the 29th January last, Sir Charles Barry and his friends have had several interviews with him on the subject of his claims, at which Sir C. Barry made the representations referred to in his letter of the 23d ultimo.

At these interviews he endeavoured to show that the reasoning by which this Board had arrived at a decision in regard to the amount of remuneration to be granted to him, was founded on insufficient data, and that the fixed remuneration of 25,000*l.* which was awarded to him as architect of the Houses of Parliament, bore a higher per-centage proportion to the then estimated expenditure than their Lordships supposed, and in fact amounted to about 4 per cent. on the anticipated expenditure, to which if there were added 1 per cent. for measurement, it would be equal to the full rate of professional remuneration usually allowed to architects; and Sir Charles Barry on this ground requests their Lordships to reconsider his case, and to award him that rate of remuneration on the whole expenditure for the New Palace, for which he states that he had, from the first, contended as his right.

The calculations by which Sir Charles Barry arrives at the conclusions on which he rests this claim are as follows:

Their Lordships, in their Minute of the 6th February 1854, assumed that the original estimate for the mere shell of the building was 707,104*l.*, and referring to the per-centage formerly allowed to attached architects of the Board of Works, concluded that the Earl of Bessborough, in calculating the sum to be paid to Sir Charles Barry, had been guided by that precedent; and looking to the further expenditure, beyond the estimate for the shell of the building, that would be required for such fittings as would be placed under the superintendence of the architect, had considered that the sum of 25,000*l.*, which he proposed to grant, would approximate very closely to 3 per cent. on the total expenditure, which was the rate formerly allowed to the attached architects of the Board of Works.

Upon this view of the case Sir Charles Barry observes that their Lordships are mistaken in regard to the amount of the original estimate. He states that the amount of that estimate was only 626,510*l.* instead of 707,104*l.* as assumed, and 25,000*l.* being rather more than 4 per cent. on such sum of 626,510*l.*, making with the addition of 1 per cent. for measuring, the full per-centage of 5 per cent.

usually allowed to architects, he contends that the Board of Works and the Lords of the Treasury intended in 1838 to give him such rate of remuneration, and had no other object in view in giving a specific sum rather than a per-centage, than that of fixing the payment according to the estimate which had been submitted.

My Lords, in consequence of this representation, think it right to review the whole of the correspondence which has passed on the subject of the remuneration of the architect of the new Houses of Parliament.

They first advert to the Report of the Commissioners of Woods, &c., on Mr. Barry's Plans and Estimates for building the New Houses of Parliament, presented to the House of Commons on the 18th April 1837, pursuant to a Resolution of a Select Committee of the House.

The following is a copy of this document:

"HOUSES OF PARLIAMENT PLANS.

"REPORT of the Commissioners of His Majesty's Woods, Forests, Land Revenues, Works and Buildings, on Mr. *Barry's* Plans and Estimates for Building the proposed New Houses of Parliament;—pursuant to a Resolution of the Select Committee on Houses of Parliament Plans, dated 9 May 1836.

"We, the Commissioners of His Majesty's Woods, Forests, Land Revenues, Works and Buildings, appointed Messrs. Seward and Chawner, two of the Architects of our Department, to examine into and report their opinion upon the Drawings and detailed Estimates prepared by Mr. Barry for the Building of the proposed New Houses; and the Report of Messrs. Seward and Chawner on the subject of this reference is now submitted for the approbation of the Honourable The House of Commons.

"Office of Woods, &c.
18 April 1837.

"*Duncannon.*
"*B. C. Stephenson.*
"*A. Milne.*"

"REPORT of Messrs. *Seward* and *Chawner*, Architects appointed by the Commissioners of His Majesty's Woods, &c., to examine and report upon the Estimate prepared by Mr. *Barry* for erecting the proposed New Houses of Parliament.

"IN obedience to the commands of the Commissioners of Woods, &c., of the 27th of January and of the 3d of February last, directing us to report upon the Estimate, prepared by Mr. Barry, of the expense of erecting the proposed New Houses of Parliament, amounting to the sum of 707,104 *l.*, we immediately commenced upon the subject of this reference, and, after a most careful and minute examination of the numerous Drawings of the details prepared by Mr. Barry for this Building, comparing them with the several measurements of quantities, checking all the prices and calculations for the proposed works, we beg leave to report, That, in our opinion, the New Houses of Parliament can be satisfactorily erected, according to the said Drawings, for the sum stated by Mr. Barry (exclusive of the proposed embankment of part of the River Thames, which we shall hereafter notice), and at the present prices of materials and labour, supposing contracts are entered into for the same upon tenders from persons of acknowledged capital and experience in the building business, unless some very extraordinary circumstances should occur in the soil in excavating for the foundations, beyond those which have been or can now be reasonably anticipated from the abovementioned amount; the estimated value of the materials of the present building, 14,000 *l.*, is to be deducted, leaving the sum to be provided for the new building as above specified, 693,104 *l.*; but we beg leave, at the same time, to observe, that Mr. Barry's Estimate, as submitted to our consideration, does not include the purchases proposed to be made in Abingdon-street for part of the site of this building, nor the expense of the necessary alterations and additions to the foot and carriage ways, with street lamps round the buildings.

	£.
The amount, as per Abstract of Bills, submitted to us by Mr. Barry	642,822
To cover his contingencies and professional charges, 10 per cent. upon the above amount	64,282
	£. 707,104

£.
707,104
14,000
£. 693,104

"The

" The probable amount of these several additions, beyond Mr. Barry's Esti-
" mate, we shall now briefly state; viz.

	£.
" The embankment to the River, to the extent of that front " of the building, which also forms the base of the ex- " treme portions thereof, with the central landing-place " and steps - - - - - - - - - -	44,000
" From the calculations made in part by Mr. Barry " and in part by Mr. Walker, the Civil Engineer, " which have been examined by us, are adopted,—	
" The public landing-place and steps from the River, at " each extremity of the building, and completing the em- " bankment of the River northward to the steps of West- " minster-bridge, about - - - - - - -	12,000
" The purchase of Premises in Abingdon-street for part of " the site, about - - - - - - - - -	70,000
" The foot and carriage ways, with lamps round the build- " ings, about - - - - - - - - -	3,000
£.	129,000

" Besides this additional expense, a further and considerable expense, that
" cannot at present be ascertained from satisfactory calculations, must, we con-
" sider, be necessarily incurred; viz.

" For fitting up, with proper bookcases, presses, and other fixtures, and fur-
" nishing the several Committee-rooms, Libraries, Offices and Clerks'
" Apartments.
" For fitting up the King's Tower, proposed as the general Depository of
" the Public Records.
" For fitting up and furnishing the Official Residences for the Speaker, the
" Serjeant-at-Arms, &c.
" For the internal lighting, warming, and ventilating the several parts of the
" building.
" For providing the great Clock and appendages in the Bell Tower, &c. &c.

" Office of Woods, &c.
17 April 1837. (signed) " *Henry Hake Seward.*
" *Tho. Chawner.*"

My Lords read also the following correspondence between the Commissioners of Woods and Forests, the Lords Commissioners of Her Majesty's Treasury, and Charles Barry, Esq. (now Sir Charles Barry), which commenced in the year following the presentation of the foregoing Report to Parliament.

" My Lords, " Office of Woods, &c., 20 February 1838.

" The subject of the remuneration to be made to Mr. Barry, as the architect
" selected for superintending the erection of the New Houses of Parliament,
" having been pressed upon the attention of this Board, in consequence of the
" opinions expressed at different times in both Houses of Parliament against the
" principle of remunerating architects by a commission or per-centage upon the
" amount of their estimates, we beg leave to state to your Lordships, that in
" deference to those opinions, we have given the subject our best and most mature
" consideration; and that having carefully considered all the circumstances of
" this case, the extent and importance of the building, the nature and description
" of the several works, the very large amount of expenditure contemplated
" in Mr. Barry's estimate, and the period within which it is proposed that such
" expenditure should be incurred,—we are therefore of opinion, that the sum of
" 25,000 *l.* will be a fair and liberal remuneration for the labour and responsi-
" bility to be imposed on Mr. Barry in the superintendence, direction, and com-
" pletion of the intended edifice.

" If

" If your Lordships should be pleased to concur with us in this opinion, we " would recommend that the payments to Mr. Barry, for his professional services, " should be made at stated intervals during the progress of the building, and in " sums proportioned to the expenditure incurred from time to time upon works " executed under his direction; that the monies so paid should be received by " Mr. Barry in full discharge for his time, trouble, and expenses, up to the period " to which each payment shall have been calculated; and that should he, from " any unforeseen circumstances, be prevented from attending to the completion " of the New Houses of Parliament, the sum to be paid to him upon the termi- " nation of his services, should, with the monies previously paid to him, as the " architect of the building, form a fair proportion of the above-mentioned sum of " 25,000 *l.*, to be calculated upon the amount of the works executed at the period " of those services ceasing to be available.

" We are, &c.

(signed) " *Duncannon.*
" *B. C. Stephenson.*
" *A. Milne.*"

" To the Right Hon. the
" Lords Commissioners of Her Majesty's
" Treasury."

" Treasury Chambers,
" 28 Feb. 1838.

" My Lord and Gentlemen,

" The Lords Commissioners of Her Majesty's Treasury having had under their " consideration your representation of the 20th instant, wherein you submit that, " in the case of Mr. Barry, the architect selected to superintend the erection of " the New Houses of Parliament, instead of a per-centage, such fixed sum or " allowance may be assigned to the architect as the circumstances may appear to " you to justify, and as my Lords may think reasonable and proper; my Lords " have directed me to inform you, that they entirely concur in your suggestion, " and are of opinion that the sum of 25,000 *l.* proposed by you will be a reasonable " and proper remuneration for the labour and responsibility to be imposed on " Mr. Barry, in the superintendence, direction, and completion of the New Houses " of Parliament; the above sum of 25,000 *l.* to be paid to him at stated intervals " during the progress of the building, and in sums proportionate to the expendi- " ture incurred from time to time upon the works executed under his direction; " and that the monies so paid, should be received by Mr. Barry in full discharge of " his time, trouble, and expenses, up to the period to which each payment shall " have been calculated; and that should he, from any unforeseen circumstances, be " prevented from attending to the completion of the New Houses of Parliament, " the sum to be paid to him upon the termination of his services, should, with the " monies previously paid to him as the architect of the building, form a fair pro- " portion of the above-mentioned sum of 25,000 *l.*, to be calculated upon the " amount of the works executed at the period of those services ceasing to be " available.

" I am, &c.

" The Commissioners of Woods, &c." (signed) " *E. J. Stanley.*"

" Treasury Chambers,
" 25 February 1839.

" My Lord and Gentlemen,

" My Lords have had under their consideration your report of the 20th " February 1838, on the subject of the remuneration to be made to Mr. Barry " for superintending the execution of the New Houses of Parliament, wherein " you stated that you had given the subject your best and most mature con- " sideration, and that having carefully considered all the circumstances of the " case, the extent and importance of the building, the nature and description of " the several works, and the very large amount of expenditure contemplated in " Mr. Barry's estimate, and the period within which it was proposed that such " expenditure should be incurred; and were of opinion that the sum of 25,000 *l.* " would be a fair and reasonable remuneration for the labour and responsibility " to be imposed on him in the superintendence, direction, and completion of the " intended edifice; and that you would recommend that the payments to Mr.

" Barry

" Barry for his professional services, should be made at stated intervals during " the progress of the building, and in sums proportioned to the expenditure " incurred from time to time upon works executed under his direction; that the " monies so paid should be received by Mr. Barry in full discharge of his time, " trouble, and expenses, up to the period to which each payment shall have been " calculated; and should he, from any unforeseen circumstances, be prevented " from attending to the completion of the New Houses of Parliament, the sum " to be paid to him upon the termination of his services, should, with the monies " previously paid to him as the architect of the building, form a fair proportion " of the above-mentioned sum of 25,000 *l.*, to be calculated upon the amount of " the works executed at the period of these services ceasing to be available. " And my Lords have directed me to inform you that they concur in the view " taken by you in your report, and are pleased to convey to you their official " sanction and direction for making the necessary arrangements for carrying it " into effect.

" I am, &c

" The Commissioners of Woods, &c." (signed) " *T. Baring.*"

" Sir, " Office of Woods, &c., 1 March 1839.

" I AM directed by this Board to transmit to you copy of a letter received from " the Treasury, dated the 25th ultimo, upon the subject of the remuneration to be " made to you for superintending the execution of the New Houses of Parlia- " ment, in lieu of commission upon the expenditure.

" I am, &c.

" Charles Barry, Esq." (signed) " *Henry Hake Seward.*"

" Sir, " Foley Place, 27 March 1839.

" I HAVE to acknowledge the receipt of your letter of the 1st instant, with copy " of a letter from the Treasury, on the subject of the remuneration for my ser- " vices in conducting the works of the proposed New Houses of Parliament. As " the amount therein proposed falls far short of the accustomed remuneration to " architects, both for public as well as private works, and as in my opinion it is " very inadequate to the skill, labour, and great responsibility that will attend the " execution of the work in question, I beg to be favoured with the particulars of " the principle upon which the proposed sum has been recommended, in order " that I may offer to the Board a few observations upon the subject.

" I am, &c.

" H. H. Seward, Esq." (signed) " *Charles Barry.*"

" Sir, " Office of Woods, &c, 4 April 1839.

" WITH reference to your letter of the 27th ultimo, I am directed to inform " you that this Board must decline furnishing the particulars of the principle " upon which the sum proposed for the remuneration of your services in con- " ducting the works of the New Houses of Parliament has been recommended.

" I am, &c.

" Charles Barry, Esq." (signed) " *Henry Hake Seward.*"

" Sir, " Foley Place, 22 April 1839.

" As the Board has not deemed it right to make me acquainted with the prin- " ciple upon which the amount of remuneration for my services in respect of the " intended New Houses of Parliament has been determined, I cannot, of course, " form any opinion, and will not question the correctness of the data upon which " it is founded. I make no doubt, however, that the proposed amount, although very far short of the customary remuneration which has hitherto been paid to architects for extensive public works, is considered by the Board to be liberal

" under all the circumstances of the case; and therefore, with this impression, I " have no wish to do otherwise than bow to its decision. In so doing, however, " I cannot, in justice to myself and the profession to which I belong, refrain from " expressing most decidedly my opinion that the amount is very inadequate to " the great labour and responsibility that will devolve upon me in the superin- " tendence, direction, and completion of the intended edifice; and I trust when " this is made manifest, as I feel sure it will, upon the completion of any consi- " derable portion of it, that there will not be any indisposition on the part of the " Board (especially if the work should prove to be satisfactory to the public at " large) to award to me the remainder of the remuneration which has hitherto " been customary on similar occasions.

" I am, &c.

" H. H. Seward, Esq." (signed) " *Charles Barry.*"

Upon careful consideration of the foregoing documents, My Lords find that they were under misapprehension on some points of detail respecting Sir Charles Barry's case.

From the Report of the Commissioners of Woods, of 18th April 1838, covering the report of their Architects, it appears that the original estimate underwent a strict scrutiny, and that the Architects reported, that, after a most careful and minute examination of the numerous drawings of the details prepared by Mr. Barry, the New Houses of Parliament could be satisfactorily erected for the sum stated by Mr. Barry; viz.,

	£.
The amount, as per abstract of bills submitted by Mr. Barry - - - - - - - -	642,822
For contingencies and professional charges, 10 per cent. - - - - - - - - -	64,282
	£.707,104

The probable additions to this Estimate were also clearly referred to, and consisted of the estimated expenses of the embankment of the river, and other like charges, amounting to 129,000 *l.*; and further various expenses, as set out in the Report, for bookcases and other fittings, for the internal warming, ventilating and lighting, and for providing the great clock and appendages, the expense of which could not then be ascertained, and which must have amounted to a very large sum of money.

It is clear from this Report, that My Lords were misled when they supposed that the original estimate comprised only the works for the mere shell of the building; that, on the contrary, it comprised the whole of the building, except the specified fittings. They are confirmed in this view by information derived by Mr. Hunt, the Surveyor of the Board of Works, who was at the time examined before a Committee of the House of Commons on the subject, and went in detail through the whole of the drawings and specifications, previously to the examination thereof by the Architects of the Board of Woods, &c.

My Lords also observe that the statement now furnished by Sir Charles Barry of the amount of the original Estimate is incorrect. The sum of 707,104 *l.*, which My Lords had taken as the amount, included indeed the addition of 10 per cent. for contingencies and professional charges; but if 5 per cent. were deducted therefrom, as the amount of architect's remuneration, the sum of 674,963 *l.* would remain as the amount of the original Estimate (independent of his own remuneration) prepared by himself, and verified by a professional gentleman employed by him. My Lords can only conjecture that Sir Charles Barry has arrived at the lower sum of 626,510 *l.*, which he now states to have been the original Estimate, by some such process as the following:

The amount as per abstract of bills was, as above stated,	£. 642,822
From this, deduct the value of old materials and other items	16,312
	£. 626,510

There

There can be no doubt, however, that an architect when paid by commission would be entitled to a per-centage on the whole expenditure without abatement. If, therefore, it had been intended to remunerate Sir Charles Barry by a per-centage on his estimate, the calculation would necessarily be made on the abstract of bills, with the addition of the usual allowance of 5 per cent. for contingencies, exclusive of professional charges.

My Lords can arrive at no other conclusion on this part of the question than that Sir Charles Barry has failed altogether to establish his position, that the remuneration of 25,000*l.* awarded to him in 1838, amounted to 4 per cent. on the estimate then before the Board of Woods, &c.

My Lords, now advert to the correspondence which passed in the following year on the subject.

It appears that when the Commissioners of Woods, &c. came to the conclusion communicated in their Report to the Treasury, of the 20th February 1838, they had before them the detailed and verified estimates, from which they had reason to believe that the building would be completed for the sum stated, subject to such considerable additions as must be made according to the Report of their surveyors in respect to fittings and other works which had not been the subject of estimate. They, therefore, well knew the whole duty and labour which would devolve on the architect, and with this knowledge they stated their opinion, that "the sum of 25,000*l.* would be a fair and liberal remuneration for the labour and responsibility to be imposed on Mr. Barry, in the *superintendence, direction, and completion* of the intended edifice." In the opinion of My Lords these terms are not susceptible of any other interpretation than that such remuneration was intended to cover every service which would devolve upon the architect in the *completion* of the building according to the estimates and specifications then before them, and the further contingent services; that it was proposed in lieu of the ordinary per-centage remuneration, and was intended to cover every charge, including that of measuring, which usually devolves on architects receiving such ordinary professional remuneration.

It is clear, also, that it was accepted by Sir Charles Barry on that understanding. When the Treasury Letter of the 25th February 1839 was communicated to him, he requested to be informed of the principle on which the proposed sum had been recommended, in order that he might offer the Board of Woods, &c. a few observations on the subject. This application having been refused by the letter of the surveyor of the Board of 4th April 1839, Sir Charles Barry addressed a letter to that officer on the 22d April 1839, in which he stated that he had no doubt that the proposed amount, *although far short of the customary remuneration which had hitherto been paid to architects for extensive works*, was considered by the Board to be liberal under all the circumstances of the case, and that with this impression, he had no wish to do otherwise than bow to its decision. He expressed at the same time his opinion that the amount was very inadequate to the great labour and responsibility that would devolve upon him in the superintendence, direction, and *completion of the intended edifice*, and his trust, that when that should be made manifest, there would not be any indisposition on the part of the Board to award to him the remainder of the remuneration which had hitherto been customary on similar occasions.

Three points are evident from this letter: 1st, That Sir Charles Barry accepted the proposed sum after a distinct refusal of explanation regarding the principle on which it was proposed; 2dly. That he was well aware at the time that it was far short of the customary remuneration to architects; and 3dly, That he also well understood that it was intended as the whole remuneration which he was to receive for the *superintendence, direction, and completion of the intended edifice.*

It is therefore too late for him now to raise questions regarding the principle on which the recommendation of the Board of Works in 1839 was based, and to found claims on the supposition that that Board had in view the payment to him of an amount equivalent to the customary remuneration of architects, when the only reservation contained in his letter of the 22d April 1839, was founded on the admitted fact that the proffered sum was considerably less than such an amount.

On reconsidering the whole circumstances, the only doubt which My Lords entertain, is, whether they have not taken too liberal a view of the considerations by which the Board of Woods, &c., were influenced when they recommended the payment of the fixed sum of 25,000*l.*; and whether, especially, in admitting

Sir Charles Barry's claim to the payment of the expense of measuring, they have not gone beyond the intentions of the arrangement of 1839.

My Lords have, however, no disposition now to re-open this question, and they are prepared to give effect to the arrangement proposed in their Minute of the 29th January last. With this view they proceed to consider the Report of the First Commissioner of Works, of the 11th April last, regarding the two points which were reserved in that Minute for future settlement, viz.:

1st. The amount of remuneration for services rendered in the warming, lighting, and ventilating arrangements connected with the New Palace.

2d. The works upon which he should hereafter be allowed the commission of 1 per cent. on measuring.

On these two points the First Commissioner has made the following suggestions:

"As to the first point, I am of opinion that Sir C. Barry is entitled to "receive, as a remuneration for his services under that head, a payment of "4,925*l.*; and I arrive at this amount by allowing him 300*l.* per annum, from "January 1840 to April 1847, in respect of the preparation of plans and estimates "for the various schemes suggested by Dr. Reid, which were either abandoned or "greatly modified previously to carrying into effect the existing arrangements, "and 500*l.* per annum from April 1847 to November 1852, for a continuance "of the same duties, and also for taking charge of the warming, ventilating and "lighting apparatus throughout the entire building, with the exception of the "House of Commons."

"Upon the second point, I am of opinion that an allowance for measurement "of one per cent. should, for the future, be made only upon such accounts as "require the services of a surveyor for their preparation, unless the architect "should be authorised in writing by the First Commissioner of this Board, and "with the approval of your Lordship's Board, to make any special charge for "special services so authorised."

My Lords concur in these recommendations, and desire that the First Commissioner of Works will govern himself thereby. They will be prepared, in compliance therewith, to direct the issue to Sir Charles Barry of 4,925*l.*, in full satisfaction of his claim for services connected with the warming, lighting and ventilating arrangements, and on the understanding that the whole principle of remuneration for his services is now finally settled, as defined by the Minute of 29th January last, and the further directions now given, and that in order to prevent any misapprehension as to the future, Sir Charles Barry will enter into an undertaking with the Board of Works to complete the buildings for the rate of commission and remuneration for measurement therein provided for.

In bringing this matter to a conclusion, My Lords feel it right to observe, with reference to statements which Sir Charles Barry has advanced in contravention of the grounds of the decision of this Board, that when their Lordships agreed to a payment being made to him at the rate of 1 per cent. for measuring, they had before them a report from the Board of Works, from which it appeared that, if the measuring were conducted under the direction of that Board, the remuneration to professional measurers for the work would be made "by a commission varying from one-half to three-quarters per cent." Their Lordships therefore consider, that in allowing him one per cent. he will be afforded ample remuneration for any duties imposed upon him personally in connexion with the service of measuring. Their Lordships have also to observe, that the principle proposed by the Board of Works, that the allowance for measuring should be made only on such accounts as require the services of a surveyor for their preparation, except under special circumstances, is not only right as respects works executed subsequently to the 2d October 1853, but would, in strictness, be applicable to past works. Their Lordships therefore feel that, in allowing him remuneration at the rate of one per cent. for measuring on the gross expenditure of 1,508,174*l.* on account of works certified by him up to the 2d October 1854, they will have conceded payments to him considerably exceeding the sum to which he would have been entitled for the mere duty of measuring, and that that sum will afford full remuneration for all the extra services referred to in the Minute of this Board of 29th January last, excepting only those connected with services for warming, lighting, and ventilating, for which a special payment is now directed.

Their

Their Lordships have before them a certified statement prepared in the Office of Works, from which it appears that the proportion of the said expenditure of 1,508,174*l.*, which represent works which would not require the services of a measurer, is 215,000*l.* Sir Charles Barry will receive under the arrangement sanctioned by this Board one per cent. on the latter sum, being 2,150*l.* above the amount to which he would be properly entitled for the actual service of measuring; and they consider that a payment of that amount will afford him ample remuneration for all the undefined extra services referred to.

Transmit copy of this Minute to Sir Charles Barry for his information.

Transmit also copy thereof to the First Commissioner of Works for his information and guidance.

Whitehall, Treasury Chambers,
July 1856.

NEW PALACE AT WESTMINSTER.

COPY of a further TREASURY MINUTE, dated the 4th day of July 1856, relative to the Amount of Remuneration to be allowed to Sir *Charles Barry* for his Services as Architect of the NEW PALACE at *Westminster*.

(*Mr. Wilson.*)

Ordered, by The House of Commons, *to be Printed,*
18 *July* 1856.

374.

Under 2 *oz.*

185

NEW PALACE AT WESTMINSTER.

RETURN to an Order of the Honourable The House of Commons, dated 25 July 1856;—*for*,

COPIES "of further CORRESPONDENCE between the TREASURY and Sir *Charles Barry*, respecting his REMUNERATION as ARCHITECT of the NEW PALACE at WESTMINSTER, up to the present Time (in continuation of Parliamentary Paper, No. 117, of the present Session)."

(*Mr. Wilson.*)

Ordered, by The House of Commons, *to be Printed*,
25 *July* 1856.

LIST of PAPERS relating to Sir *Charles Barry*'s CLAIM.

DATE.	FROM AND TO WHOM LETTERS WRITTEN; SUBJECT, &c.	PAGE.
1856:		
14 February -	Sir Charles Barry to Mr. Austin, for information as to the Treasury proposal in regard to his remuneration - - - - - -	3
16 „ -	Mr. Austin to Sir Charles Barry, in reply to the above - - -	3
20 „ -	Sir Benjamin Hall to Sir Charles Barry, as to non-receipt of authority to communicate with him on the two undermentioned points in the Treasury Minute of the 29th January last - - - -	3
22 „ -	Mr. Wilson to Sir Benjamin Hall, in regard to the two points left undetermined by the Treasury Minute of the 29th January last; viz., the amount of remuneration which should be allowed to Sir Charles Barry for services rendered in the warming, lighting, and ventilating arrangements, and the works upon which he should hereafter be allowed the commission of 1 per cent. for measuring at the New Palace, Westminster - - - - - - - - - -	3
23 „ -	Sir Benjamin Hall to the Treasury, acknowledging receipt of the above, and suggesting that the matters referred to in the Treasury Letter should stand over for a short time until they be fully gone into by the new Surveyor of Works of his Department - - -	4
29 „ -	Treasury Minute in reply thereto - - - - - - - -	4
3 March -	Mr. Austin to Sir Charles Barry, requesting particulars of claim for warming and ventilating services in the New Palace at Westminster	5
5 „ -	Sir Charles Barry to Mr. Austin, enclosing claim for warming, &c., New Palace - - - - - - - - - - -	5
26 „ -	Sir Charles Barry to Sir Benjamin Hall, with accounts for professional services - - - - - - - - - - - -	6
1 April -	Mr. Austin to Sir Charles Barry, acknowledging receipt of the above -	8
11 „ -	Sir Benjamin Hall to the Treasury, relative to the amount of remuneration to be allowed to Sir Charles Barry for services rendered in the warming, lighting, and ventilating arrangements connected with the New Palace at Westminster, and the works upon which he should hereafter be allowed the commission of 1 per cent. - -	8
23 June - -	Sir Charles Barry to Mr. Wilson, requesting to be informed whether the Lords of the Treasury are disposed to reconsider the offer made to him by the Minute of 29 January last, particularly as regards the extra services not yet recognised or covered by the Commission proposed; or whether they are inclined to accede to a reference upon the question at issue - - - - - - - - - -	9
4 July - -	Further Treasury Minute relative to the remuneration to be allowed to Sir Charles Barry for his services as architect of the New Palace at Westminster - - - - - - - - - - - -	9
9 „ - -	Royal Institute of British Architects to Mr. Wilson. Resolution protesting against the course proposed to be adopted by Her Majesty's Government in regard to the remuneration of Sir Charles Barry -	17
10 „ - -	Sir Charles Trevelyan to Sir Charles Barry, with printed copy of the Minute of 4 July - - - - - - - - - -	18
12 „ - -	Mr. Austin to Sir Charles Barry, requesting his attendance at the Office of Works to enter into arrangements respecting professional remuneration - - - - - - - - - - -	18
15 „ - -	Mr. Wilson to the Royal Institute of British Architects, in reply to their communication of the 9th inst. - - - - - - -	18
15 „ - -	Sir Charles Barry to Sir Charles Trevelyan, accepting the terms proposed in the Treasury Minute of 4 July - - - - - -	19
24 „ - -	Royal Institute of British Architects, acknowledging receipt of Treasury Letter of the 15th instant, respecting the remuneration of Sir Charles Barry as Architect of the New Palace at Westminster - - -	20

COPIES of further CORRESPONDENCE between the Treasury and Sir *Charles Barry* respecting his REMUNERATION as ARCHITECT of the NEW PALACE at WESTMINSTER up to the present Time.

From Sir *Charles Barry* to *A. Austin*, Esq.

Sir, Old Palace Yard, 14 February 1856.

WITH reference to my claims as the Architect of the New Palace at Westminster, I have to request that you will inform the Chief Commissioner of Her Majesty's Works, Palaces and Public Buildings, &c., that I am referred by the Treasury to his Department, for information as to the data upon which a proposition has been made to me by their Lordships, for the liquidation of those claims. I have therefore to request the favour of an appointment to wait upon the Chief Commissioner on the subject

I am, &c.
(signed) *Charles Barry.*

From *A. Austin*, Esq., to Sir *Charles Barry.*

Sir, Office of Works, &c., 16 February 1856.

I AM directed by the Chief Commissioner of Her Majesty's Works, &c. to acknowledge the receipt of your letter of the 14th instant, stating that you are referred by the Treasury to this Department for information as to the data upon which a proposition has been made to you by their Lordships for the liquidation of your claims as the Architect of the New Palace at Westminster, and requesting, therefore, an appointment to wait upon the Chief Commissioner on the subject.

In reply, I am directed to acquaint you that the Chief Commissioner has not received any communication from the Treasury since Mr. Wilson, by direction of their Lordships, sent him a copy of the Treasury Minute of the 29th ult.

The letter transmitting that Minute does not contain any instructions to afford you the information alluded to by you; but the Chief Commissioner will be happy to see you here on Monday next, the 18th instant, at 2 o'clock, when he requests you will be so good as to bring the letter which authorises you to see him on the subject.

I am, &c.
(signed) *Alfred Austin*, Secretary.

From Sir *B. Hall*, Bart., M. P., to Sir *Charles Barry.*

Office of Works, 20 February 1856,
Dear Sir Charles Barry, 5 o'clock, P. M.

AT the hour I write no letter has reached this office from the Treasury, in which I am requested to communicate with you upon the two points which were left undetermined by their Lordships' Minute of the 29th ult. I can only repeat that as soon as I receive any such communication I will give it immediate attention; but again I add that I am not aware I can give you any information beyond that which is in the possession of the Treasury.

Yours truly,
(signed) *B. Hall.*

From *James Wilson*, Esq., M.P., to Sir *B. Hall*, Bart., M.P.

Sir, Treasury Chambers, 22 February 1856.

I AM commanded by the Lords Commissioners of Her Majesty's Treasury to observe, with reference to their Lordships' Minute of the 29th ultimo, on the subject of Sir Charles Barry's claims, copy of which was communicated to you on the 5th instant, that two points were left thereby undetermined, viz., the amount of remuneration which should be allowed to Sir Charles Barry for services rendered in the warming, lighting, and ventilating arrangements, and the works upon which

which he should hereafter be allowed the commission of one per cent. for measuring.

With respect to the first point, My Lords request that you will call upon Sir Charles Barry to make such a clear statement of his case as was represented in your Report of the 28th December last to be necessary before you could go into the matter, and that upon the receipt of such statement, you will, after investigation, report to this Board your views regarding the services actually performed, and the remuneration which it may be proper to allow Sir Charles Barry for the services in question.

Upon the second point, I am to observe, that My Lords conceded the allowance of one per cent. for measurement, on the gross expenditure of 1,506,845*l.*, in order to cover claims of an indefinite character, which had been advanced by Sir Charles Barry; but this sum included charges amounting to 14,439*l.* 2*s.*, on which it appeared, from Sir W. Molesworth's Report of the 22d January 1855, to be doubtful whether any architectural commission should be allowed; and their Lordships considered that the works to which that sum applied were not of a character to admit of measurement, and in respect of which, therefore, an allowance under that head would not, under ordinary circumstances, apply. Besides this sum of 14,439*l.* 2*s.*, with regard to which it was doubtful if commission applied, there were included in the gross expenditure other considerable sums to which the architect's commission of 3 per cent. would apply, but with regard to which, under ordinary circumstances, a commission for measurement would not be applicable; such as furniture and materials purchased through Sir Charles Barry and certified by him. With regard to the future, it is their Lordships' intention, in limiting the allowance of one per cent. to such expenditure as measurement might fairly apply to, to except works of this character; and My Lords request that you will take the subject into consideration with the view of laying down a definite rule, founded on professional practices, in regard to the mode in which the remuneration for measurement should be calculated.

Their Lordships' view is, that Sir Charles Barry should only be allowed one per cent. on such works, and on such expenditure as would be computed in the case of a separate contractor being employed for the specific duty of measuring; and, in order that no misapprehension should arise as to their Lordships' intention, they request that you will put the professional officers of your department in communication with Sir Charles Barry upon this point, that these views may be fully explained and understood by both parties.

I am, &c.
(signed) *James Wilson.*

From Sir *B. Hall*, Bart., M.P., to the Right Honourable the Lords Commissioners of Her Majesty's Treasury.

My Lords, Office of Works, 23 February 1856.

I BEG leave to acknowledge the receipt of Mr. Wilson's letter of the 22d inst., on the subject of the amount of remuneration to be allowed to Sir C. Barry for his professional services as architect of the New Palace at Westminster.

The matters to which your Lordships' letter relates being of so much import ance, I would suggest to your Lordships whether they had not better stand over for a short time, in order that they may be fully gone into by the new Surveyor of Works of this department, respecting whose appointment I hope to be able to write to your Lordships on Tuesday or Wednesday next.

I beg leave to add that I have seen Sir Charles Barry this day, and that he is quite satisfied with the postponement I have suggested.

I am, &c.
(signed) *B. Hall.*

TREASURY MINUTE, dated 29 February 1856.

ACQUAINT Sir B. Hall that my Lords have no objection to the postponement of the matter until the new Surveyor of Works shall have been established in his office.

From

From *A. Austin*, Esq., to Sir *C. Barry*.

Office of Works, &c.,
3 March 1856.

Sir,

I am directed by the Chief Commissioner of Her Majesty's Works, &c., to inform you that he has received a Treasury letter on the subject of your claim for remuneration for your services in regard to the New Palace of Westminster, in which it is stated, with reference to the amount of remuneration to be allowed to you for services rendered in the warming, lighting, and ventilating arrangements, which was left undetermined by their Lordships' Minute of the 29th January last, that their Lordships request that you may be called upon to make a clear statement to the Chief Commissioner of the nature of the services performed, and the time bestowed thereon by you, and that he may then report to their Lordships his opinion as to those services, and the remuneration to be allowed to you for the same.

In obedience to those directions, I am to request that you will furnish the Chief Commissioner with a full statement of particulars on which you found your claim in regard to the matter in question, in order to enable him to report thereon to the Treasury.

I am, &c.
(signed) *Alfred Austin*, Secretary.

From Sir *Charles Barry* to *A. Austin*, Esq.

Old Palace Yard, 5 March 1856.

Sir,

In compliance with the request contained in your letter of the 3d instant, I enclose a full statement of the particulars of my claim in respect of the warming, ventilating, and lighting arrangements and apparatus, and their operation, in the New Palace at Westminster, from the year 1840 to the year 1852; and I have to request an interview with the Chief Commissioner prior to making his report to the Treasury on the subject, as well as for the purpose of checking the amount of certified expenditure upon the New Palace up to the 2d of October 1854, as stated in the Minute of the Lords Commissioners of Her Majesty's Treasury, referred to in your letter.

I am, &c.
(signed) *C. B.*

Statement made by Sir *C. Barry*.

New Palace, Westminster.

Architect's Claim for Warming, Ventilating and Lighting Arrangements.

	£.	s.	d.
For services connected with Dr. Reid, and the various schemes suggested by him for warming, ventilating, and fire-proofing the New Palace, from 5th January 1840 to 5th August 1850, all of which schemes were either abandoned or greatly modified previous to carrying into effect the existing arrangements; and also for services with reference to several official inquiries before Referees and Parliamentary Committees, into Dr. Reid's arrangements and alleged grievances; preparing drawings, diagrams, reports, statements, calculations, and estimates connected with this service, amounting in all to above 560 documents; constant interviews with the Board of Works, the New Palace Commissioners, Dr. Reid, and his clerks and others; and numerous attendances to give evidence, &c.; for time of self and clerks, and for expenses incurred during 10½ years at 300 *l.* per annum - - - - - - - - - -	3,150	–	–
For taking charge of the warming, ventilating, and lighting apparatus, and its operation throughout the entire building, with the exception of the House of Commons, from 15th April 1847 to the 1st November 1852, which services are now performed by Mr. Gurney and his assistants; for time of self and clerks, and for expenses incurred during 5½ years, at 400 *l.* per annum - - - - - - - - - - -	2,200	–	–
£.	5,350	–	–

From Sir *Charles Barry* to Sir *B. Hall*, Bart., M. P.

Dear Sir Benjamin, Old Palace Yard, 26 March 1856.

The negotiation which you are aware has recently taken place with the Lords Commissioners of Her Majesty's Treasury with respect to my outstanding claims upon the Government having been abruptly terminated by their Lordships, I think it right to forward to you, as head of that department of the Government under which I have been employed, the enclosed accounts of what I consider to be due to me for my services up to the present time; and, as the balance is large and of considerable importance to me, I have most earnestly to request the favour of your attention to the settlement of them at your earliest convenience. Pending compliance with the Order of the House of Commons for laying the recent correspondence with the Treasury upon the table of that House, I beg to forward to you the enclosed papers, which I have been advised to print for distribution and the elucidation of the merits and bearings of my case.

I have, &c.

(signed) *Charles Barry.*

Her Majesty's Commissioners of Works, Public Buildings, &c., to Sir *Charles Barry.*

17 April 1837 to 25 March 1856:	£.	s.	d.
For professional services as the Architect of the New Palace at Westminster, including the financial part of his duties:			
Amount of expenditure, exclusive of the cost of the River embankment, clerks of works, &c., as certified, 1,620,058*l.* (errors excepted) at 5 per cent. - - - - -	81,002	18	–
Cr.			
By amounts received on account up to the 19th October 1854	44,735	–	–
Balance due - - - - - £.	36,267	18	–

(Exclusive of interest upon deferred payments.)

HER MAJESTY'S COMMISSIONERS of Works, Public Buildings, &c., to Sir *Charles Barry*.

	£.	s.	d.
5 January 1840 to 1 November 1852 inclusive:			
For services connected with the structural arrangements for warming, ventilating, and lighting at the New Palace at Westminster, in conjunction with Dr. Reid, expenses included	3,150	–	–
15 April 1847 to 1 November 1852:			
For charge and superintendence of the warming, ventilating, and lighting operations throughout the building, with the exception of the House of Commons, as to warming and ventilating, expenses included	2,200	–	–
1842 to 1855 inclusive:			
For services connected with the Fine Arts Commission relative to the decoration of the New Palace at Westminster, expenses included	790	–	–
1837 to 1840, and 1844 to 1845 inclusive:			
For services connected with the Records of the United Kingdom, and their deposit in the New Palace at Westminster, expenses included	950	–	–
1841 to 1855 inclusive:			
For designs and drawings for the New Palace at Westminster, rendered useless in consequence of varied orders	1,200	–	–
1844 to 1845:			
For services connected with the collection and formation of a public museum of mediæval carvings in wood and stone at the Government works at Thames Bank, including expenses	250	–	–
1845 and subsequently:			
For services connected with the purchase of a stock of well-seasoned oak for the Government works at Thames Bank	nil.		
1842 to 1856:			
For personal direction and the employment and payment of the men engaged upon the wood and stone carving works of the New Palace at Westminster, at 100*l.* per annum	1,400	–	–
1843 to 1849:			
For numerous and in some cases very elaborate returns to Parliament with respect to the New Palace at Westminster; attendances upon 16 Parliamentary Committees of inquiry, &c., for plans, diagrams, and other data for the elucidation of evidence, &c., and for correspondence and attendances upon authorities, expenses included	500	–	–
1842 to 1850:			
Resisting unfounded claims and legal proceedings, consultations with the solicitors of the Board, and arbitrating upon the several cases; correspondence thereon; expenses included	500	–	–
£.	10,940	–	–

From *A. Austin*, Esq., to Sir *Charles Barry*.

Sir, Office of Works, &c., 1 April 1856.

I AM directed by the First Commissioner of Her Majesty's Works, &c., to acknowledge the receipt of your letter of the 26th ultimo, transmitting the following papers in regard to your outstanding claims for services connected with the New Palace at Westminster, requesting my attention to the settlement of them at my earliest convenience; viz.:

	£.	s.	d.
1. Account for your professional services as Architect, 5 per cent. on amount of expenditure - -	81,002	18	–
Deduct amount received on account - -	44,735	–	–
Balance claimed - - -	£. 36,267	18	–

(Exclusive of interest on deferred payments.)

2. Account for miscellaneous services - - £. 10,940 – –
3. Printed statement by you of the grounds of difference between you and the Treasury.
4. Printed copies of Treasury Minute, dated 29th January 1856, and of your letter to the "Times," dated 15th February.
5. Printed statement of professional remuneration paid to Architects by the Government on account of various Public Buildings.

In reply, I am directed to inform you that the whole question of the settlement of your accounts has, as you must be quite aware, been long since removed from this department to the Treasury, with the exception of the amount of remuneration to be allowed to you for services rendered in the warming, lighting, and ventilating arrangements, and the works upon which you should hereafter be allowed the commission of 1 per cent. for measuring; the consideration of which points you are also aware was, with your concurrence, postponed until a new Surveyor of Works and Public Buildings was appointed.

This has been done, and the matter is now undergoing investigation, and I am directed to add that no time shall be lost in the settlement of the affair so far as the reference to this department is concerned.

I am, &c.
(signed) *Alfred Austin*, Secretary.

From Sir *B. Hall*, Bart., M.P. to the Right Honourable the Lords Commissioners of Her Majesty's Treasury.

My Lords, Office of Works, &c., 11 April 1856.

WITH reference to Mr. Wilson's letter of the 22d February last, respecting the amount of remuneration to be allowed to Sir C. Barry for his professional services as Architect of the New Palace at Westminster, in which he states, by direction of your Lordships, that two points were left undetermined by your Lordships' Minute of the 29th January last; viz.:

1st. The amount of remuneration to Sir Charles for services rendered in the warming, lighting, and ventilating arrangements connected with the New Palace; and,

2dly. The works upon which he should hereafter be allowed the commission of one per cent. for measuring;

I beg leave to report to your Lordships that, as to the first point, I am of opinion that Sir C. Barry is entitled to receive, as a remuneration for his services under that head, a payment of 4,925 *l.*; and I arrive at this amount by allowing him 300 *l.* per annum from January 1840 to April 1847, in respect of the preparation of plans and estimates for the various schemes suggested by Dr. Reid, which were either abandoned, or greatly modified, previously to carrying into effect the existing arrangements; and 500 *l.* per annum from April 1847 to November 1852, for a continuance of the same duties, and also for taking charge of

of the warming, ventilating, and lighting apparatus throughout the entire building, with the exception of the House of Commons.

Upon the second point, I am of opinion that an allowance for measurement of 1 per cent. should for the future be made only upon such accounts as require the services of a surveyor for their preparation, unless the architect should be authorised, in writing, by the First Commissioner of this Board, and with the approval of your Lordships' Board, to make any special charge for special services so authorised.

I beg leave to add that I have seen Sir C. Barry upon this point, and have made him acquainted with the opinion I have formed, and which I now transmit to your Lordships.

The delay which has taken place in replying to your Lordships' inquiries in this matter has arisen in consequence of the subject having been, under the sanction of your Lordships' letter of the 4th ultimo, postponed until the establishment in this office of the new Surveyor of Works and Buildings, in which delay, as your Lordships are aware, Sir C. Barry has acquiesced.

I am, &c.
(signed) *B. Hall.*

From Sir *Charles Barry* to *James Wilson*, Esq., M.P.

Sir, Old Palace Yard, 23 June 1856.

With reference to the recent interviews of myself and friends with the Chancellor of the Exchequer and yourself, and the arguments then adduced in support of my claims as the architect of the New Palace at Westminster, which, you were pleased to state, were new to you and deserving of attention, I have to request to be informed, at your earliest convenience, whether the Lords Commissioners of Her Majesty's Treasury are in consequence disposed to reconsider the offer made to me as expressed in their Minute of the 29th January last, particularly as regards the extra services not yet recognised, or covered by the commission proposed, and the question of interest upon protracted payments, or whether they are inclined to accede to a reference upon the whole question at issue, or any part thereof, which I have so often urged, as the only proper mode of adjusting differences, where, practically, there are no means of disposing of them at law, and where the parties to them only wish for what is fair and reasonable.

I am, &c.
(signed) *Charles Barry.*

Treasury Minute, dated 4th July 1856.

6084. Read Report from the First Commissioner of Works, dated 11 April 1856, on the two points left undetermined by the Treasury Minute of the 29th January last, with respect to the amount of remuneration to be allowed to Sir C. Barry for his services as architect of the New Palace at Westminster, viz.:

1. The amount of remuneration to Sir C. Barry for services rendered in the warming, lighting and ventilating arrangements connected with the New Palace, and,—

2. The works upon which he should hereafter be allowed the commission of 1 per cent. for measuring.

10566. Read also letter from Sir Charles Barry, dated 23 June 1856, requesting to be informed whether the Lords of the Treasury are disposed (in consequence of the representations subsequently made to them) to reconsider the offer made to him by the Minute of 29th January last, particularly as regards the extra services not yet recognised or covered by the commission proposed; or, whether they are inclined to accede to a reference upon the question at issue.

Mr. Wilson informs the Board that, since the date of their Lordships' Minute of the 29th January last, Sir Charles Barry and his friends have had several

interviews with him on the subject of his claims, at which Sir C. Barry made the representations referred to in his letter of the 23d ultimo.

At these interviews he endeavoured to show that the reasoning by which this Board had arrived at a decision in regard to the amount of remuneration to be granted to him, was founded on insufficient data, and that the fixed remuneration of 25,000*l.* which was awarded to him as architect of the Houses of Parliament, bore a higher per-centage proportion to the then estimated expenditure than their Lordships supposed, and in fact amounted to about 4 per cent. on the anticipated expenditure, to which if there were added 1 per cent. for measurement, it would be equal to the full rate of professional remuneration usually allowed to architects; and Sir Charles Barry on this ground requests their Lordships to reconsider his case, and to award him that rate of remuneration on the whole expenditure for the New Palace, for which he states that he had, from the first, contended as his right.

The calculations by which Sir Charles Barry arrives at the conclusions on which he rests this claim are as follows:

Their Lordships, in their Minute of the 6th February 1854, assumed that the original estimate for the mere shell of the building was 707,104*l.*, and referring to the per-centage formerly allowed to attached architects of the Board of Works, concluded that the Earl of Bessborough, in calculating the sum to be paid to Sir Charles Barry, had been guided by that precedent; and looking to the further expenditure, beyond the estimate for the shell of the building, that would be required for such fittings as would be placed under the superintendence of the architect, had considered that the sum of 25,000*l.*, which he proposed to grant, would approximate very closely to 3 per cent. on the total expenditure, which was the rate formerly allowed to the attached architects of the Board of Works.

Upon this view of the case Sir Charles Barry observes that their Lordships are mistaken in regard to the amount of the original estimate. He states that the amount of that estimate was only 626,510*l.* instead of 707,104*l.* as assumed, and 25,000*l.* being rather more than 4 per cent. on such sum of 626,510*l.*, making with the addition of 1 per cent. for measuring, the full per-centage of 5 per cent. usually allowed to architects, he contends that the Board of Works and the Lords of the Treasury intended in 1838 to give him such rate of remuneration, and had no other object in view in giving a specific sum rather than a per-centage, than that of fixing the payment according to the estimate which had been submitted.

My Lords, in consequence of this representation, think it right to review the whole of the correspondence which has passed on the subject of the remuneration of the architect of the new Houses of Parliament.

They first advert to the Report of the Commissioners of Woods, &c., on Mr. Barry's Plans and Estimates for building the New Houses of Parliament, presented to the House of Commons on the 18th April 1837, pursuant to a Resolution of a Select Committee of the House.

The following is a copy of this document:

"HOUSES OF PARLIAMENT PLANS.

"REPORT of the Commissioners of His Majesty's Woods, Forests, Land Revenues, Works and Buildings, on Mr. *Barry's* Plans and Estimates for Building the proposed New Houses of Parliament;—pursuant to a Resolution of the Select Committee on Houses of Parliament Plans, dated 9 May 1836.

"We, the Commissioners of His Majesty's Woods, Forests, Land Revenues, Works and Buildings, appointed Messrs. Seward and Chawner, two of the Architects of our Department, to examine into and report their opinion upon the Drawings and detailed Estimates prepared by Mr. Barry for the Building of the proposed New Houses; and the Report of Messrs. Seward and Chawner on the subject of this reference is now submitted for the approbation of the Honourable The House of Commons.

"Office of Woods, &c.
18 April 1837.

"*Duncannon.*
"*B. C. Stephenson.*
"*A. Milne.*"

" Report of Messrs. *Seward* and *Chawner*, Architects appointed by the Com-
" missioners of His Majesty's Woods, &c., to examine and report upon the
" Estimate prepared by Mr. *Barry* for erecting the proposed New Houses of
" Parliament.

" In obedience to the commands of the Commissioners of Woods, &c., of the " 27th of January and of the 3d of February last, directing us to report upon " the Estimate, prepared by Mr. Barry, of the expense of erecting " the proposed New Houses of Parliament, amounting to the sum " of 707,104 *l.*, we immediately commenced upon the subject of " this reference, and, after a most careful and minute examination " of the numerous Drawings of the details prepared by Mr. Barry " for this Building, comparing them with the several measure- " ments of quantities, checking all the prices and calculations for " the proposed works, we beg leave to report, That, in our opinion, " the New Houses of Parliament can be satisfactorily erected, according to the " said Drawings, for the sum stated by Mr. Barry (exclusive of the proposed " embankment of part of the River Thames, which we shall hereafter notice), and " at the present prices of materials and labour, supposing contracts are entered " into for the same upon tenders from persons of acknowledged capital and ex- " perience in the building business, unless some very extraordinary circumstances " should occur in the soil in excavating for the foundations, beyond those which " have been or can now be reasonably anticipated from the abovementioned " amount; the estimated value of the materials of the present building, 14,000 *l.*, " is to be deducted, leaving the sum to be provided for the new building as above " specified, 693,104 *l.*; but we beg leave, at the same time, to observe, that Mr. " Barry's Estimate, as submitted to our consideration, does not include the pur- " chases proposed to be made in Abingdon-street for part of the site of this build- " ing, nor the expense of the necessary alterations and additions to the foot and " carriage ways, with street lamps round the buildings.

	£.
The amount, as per Abstract of Bills, submitted to us by Mr. Barry - - -	642,822
To cover his contingencies and professional charges, 10 per cent. upon the above amount - - - -	64,282
	£. 707,104

	£.
	707,104
	14,000
	£. 693,104

" The probable amount of these several additions, beyond Mr. Barry's Esti- " mate, we shall now briefly state; viz.

	£.
" The embankment to the River, to the extent of that front " of the building, which also forms the base of the ex- " treme portions thereof, with the central landing-place " and steps - - - - - - - - - -	44,000
" From the calculations made in part by Mr. Barry " and in part by Mr. Walker, the Civil Engineer, " which have been examined by us, are adopted,—	
" The public landing-place and steps from the River, at " each extremity of the building, and completing the em- " bankment of the River northward to the steps of West- " minster-bridge, about - - - - - - -	12,000
" The purchase of Premises in Abingdon-street for part of " the site, about - - - - - - - - -	70,000
" The foot and carriage ways, with lamps round the build- " ings, about - - - - - - - - - -	3,000
£.	129,000

" Besides this additional expense, a further and considerable expense, that " cannot at present be ascertained from satisfactory calculations, must, we con- " sider, be necessarily incurred; viz.

" For fitting up, with proper bookcases, presses, and other fixtures, and fur- " nishing the several Committee-rooms, Libraries, Offices and Clerks' " Apartments.

" For fitting up the King's Tower, proposed as the general Depository of " the Public Records.

" For fitting up and furnishing the Official Residences for the Speaker, the " Serjeant-at-Arms, &c.

" For the internal lighting, warming, and ventilating the several parts of the " building.

" For providing the great Clock and appendages in the Bell Tower, &c. &c.

" Office of Woods, &c.
17 April 1837.

(signed) " *Henry Hake Seward.*
" *Tho. Chawner.*"

My Lords read also the following correspondence between the Commissioners of Woods and Forests, the Lords Commissioners of Her Majesty's Treasury, and Charles Barry, Esq. (now Sir Charles Barry), which commenced in the year following the presentation of the foregoing Report to Parliament.

" My Lords, " Office of Woods, &c., 20 February 1838.

" The subject of the remuneration to be made to Mr. Barry, as the architect " selected for superintending the erection of the New Houses of Parliament, " having been pressed upon the attention of this Board, in consequence of the " opinions expressed at different times in both Houses of Parliament against the " principle of remunerating architects by a commission or per-centage upon the " amount of their estimates, we beg leave to state to your Lordships, that in " deference to those opinions, we have given the subject our best and most mature " consideration; and that having carefully considered all the circumstances of " this case, the extent and importance of the building, the nature and description " of the several works, the very large amount of expenditure contemplated " in Mr. Barry's estimate, and the period within which it is proposed that such " expenditure should be incurred,—we are therefore of opinion, that the sum of " 25,000 *l.* will be a fair and liberal remuneration for the labour and responsi- " bility to be imposed on Mr. Barry in the superintendence, direction, and com- " pletion of the intended edifice.

" If your Lordships should be pleased to concur with us in this opinion, we " would recommend that the payments to Mr. Barry, for his professional services, " should be made at stated intervals during the progress of the building, and in " sums proportioned to the expenditure incurred from time to time upon works " executed under his direction; that the monies so paid should be received by " Mr. Barry in full discharge for his time, trouble, and expenses, up to the period " to which each payment shall have been calculated; and that should he, from " any unforeseen circumstances, be prevented from attending to the completion " of the New Houses of Parliament, the sum to be paid to him upon the termi- " nation of his services, should, with the monies previously paid to him, as the " architect of the building, form a fair proportion of the above-mentioned sum of " 25,000 *l.*, to be calculated upon the amount of the works executed at the period " of those services ceasing to be available.

" We are, &c.

(signed) " *Duncannon.*
" *B. C. Stephenson.*
" *A. Milne.*"

" To the Right Hon. the
" Lords Commissioners of Her Majesty's
" Treasury."

" Treasury Chambers,
" My Lord and Gentlemen, " 28 Feb. 1838.

" The Lords Commissioners of Her Majesty's Treasury having had under their " consideration your representation of the 20th instant, wherein you submit that, " in the case of Mr. Barry, the architect selected to superintend the erection of " the New Houses of Parliament, instead of a per-centage, such fixed sum or " allowance may be assigned to the architect as the circumstances may appear to " you to justify, and as my Lords may think reasonable and proper; my Lords " have directed me to inform you, that they entirely concur in your suggestion,

" and

" and are of opinion that the sum of 25,000 *l.* proposed by you will be a reasonable " and proper remuneration for the labour and responsibility to be imposed on " Mr. Barry, in the superintendence, direction, and completion of the New Houses " of Parliament; the above sum of 25,000 *l.* to be paid to him at stated intervals " during the progress of the building, and in sums proportionate to the expendi- " ture incurred from time to time upon the works executed under his direction; " and that the monies so paid, should be received by Mr. Barry in full discharge of " his time, trouble, and expenses, up to the period to which each payment shall " have been calculated; and that should he, from any unforeseen circumstances, be " prevented from attending to the completion of the New Houses of Parliament, " the sum to be paid to him upon the termination of his services, should, with the " monies previously paid to him as the architect of the building, form a fair pro- " portion of the above-mentioned sum of 25,000 *l.*, to be calculated upon the " amount of the works executed at the period of those services ceasing to be " available.

" I am, &c.

" The Commissioners of Woods, &c." (signed) " *E. J. Stanley.*"

" Treasury Chambers,

" My Lord and Gentlemen, " 25 February 1839.

" My Lords have had under their consideration your report of the 20th " February 1838, on the subject of the remuneration to be made to Mr. Barry " for superintending the execution of the New Houses of Parliament, wherein " you stated that you had given the subject your best and most mature con- " sideration, and that having carefully considered all the circumstances of the " case, the extent and importance of the building, the nature and description of " the several works, and the very large amount of expenditure contemplated in " Mr. Barry's estimate, and the period within which it was proposed that such " expenditure should be incurred; and were of opinion that the sum of 25,000 *l.* " would be a fair and reasonable remuneration for the labour and responsibility " to be imposed on him in the superintendence, direction, and completion of the " intended edifice; and that you would recommend that the payments to Mr. " Barry for his professional services, should be made at stated intervals during " the progress of the building, and in sums proportioned to the expenditure " incurred from time to time upon works executed under his direction; that the " monies so paid should be received by Mr. Barry in full discharge of his time, " trouble, and expenses, up to the period to which each payment shall have been " calculated; and should he, from any unforeseen circumstances, be prevented " from attending to the completion of the New Houses of Parliament, the sum " to be paid to him upon the termination of his services, should, with the monies " previously paid to him as the architect of the building, form a fair proportion " of the above-mentioned sum of 25,000 *l.*, to be calculated upon the amount of " the works executed at the period of these services ceasing to be available. " And my Lords have directed me to inform you that they concur in the view " taken by you in your report, and are pleased to convey to you their official " sanction and direction for making the necessary arrangements for carrying it " into effect.

" I am, &c.

" The Commissioners of Woods, &c." (signed) " *T. Baring.*"

" Sir, " Office of Woods, &c., 1 March 1839.

" I am directed by this Board to transmit to you copy of a letter received from " the Treasury, dated the 25th ultimo, upon the subject of the remuneration to be " made to you for superintending the execution of the New Houses of Parlia- " ment, in lieu of commission upon the expenditure.

" I am, &c.

" Charles Barry, Esq." (signed) " *Henry Hake Seward.*"

"Sir, "Foley Place, 27 March 1839.

"I HAVE to acknowledge the receipt of your letter of the 1st instant, with copy "of a letter from the Treasury, on the subject of the remuneration for my services in conducting the works of the proposed New Houses of Parliament. As "the amount therein proposed falls far short of the accustomed remuneration to "architects, both for public as well as private works, and as in my opinion it is "very inadequate to the skill, labour, and great responsibility that will attend the "execution of the work in question, I beg to be favoured with the particulars of "the principle upon which the proposed sum has been recommended, in order "that I may offer to the Board a few observations upon the subject.

"I am, &c.

"H. H. Seward, Esq." (signed) "*Charles Barry.*"

"Sir, "Office of Woods, &c., 4 April 1839.

"WITH reference to your letter of the 27th ultimo, I am directed to inform "you that this Board must decline furnishing the particulars of the principle "upon which the sum proposed for the remuneration of your services in conducting the works of the New Houses of Parliament has been recommended.

"I am, &c.

"Charles Barry, Esq." (signed) "*Henry Hake Seward.*"

"Sir, "Foley Place, 22 April 1839.

"As the Board has not deemed it right to make me acquainted with the principle upon which the amount of remuneration for my services in respect of the "intended New Houses of Parliament has been determined, I cannot, of course, "form any opinion, and will not question the correctness of the data upon which "it is founded. I make no doubt, however, that the proposed amount, although "very far short of the customary remuneration which has hitherto been paid to "architects for extensive public works, is considered by the Board to be liberal "under all the circumstances of the case; and therefore, with this impression, I "have no wish to do otherwise than bow to its decision. In so doing, however, "I cannot, in justice to myself and the profession to which I belong, refrain from "expressing most decidedly my opinion that the amount is very inadequate to "the great labour and responsibility that will devolve upon me in the superintendence, direction, and completion of the intended edifice; and I trust when "this is made manifest, as I feel sure it will, upon the completion of any considerable portion of it, that there will not be any indisposition on the part of the "Board (especially if the work should prove to be satisfactory to the public at "large) to award to me the remainder of the remuneration which has hitherto "been customary on similar occasions.

"I am, &c.

"H. H. Seward, Esq." (signed) "*Charles Barry.*"

Upon careful consideration of the foregoing documents, My Lords find that they were under misapprehension on some points of detail respecting Sir Charles Barry's case.

From the Report of the Commissioners of Woods, of 18th April 1838, covering the report of their Architects, it appears that the original estimate underwent a strict scrutiny, and that the Architects reported, that, after a most careful and minute examination of the numerous drawings of the details prepared by Mr. Barry, the New Houses of Parliament could be satisfactorily erected for the sum stated by Mr. Barry; viz.,

	£.
The amount, as per abstract of bills submitted by Mr. Barry - - - - - - - - -	642,822
For contingencies and professional charges, 10 per cent. - - - - - - - - -	64,282
	£.707,104

The

The probable additions to this Estimate were also clearly referred to, and consisted of the estimated expenses of the embankment of the river, and other like charges, amounting to 129,000 *l.*; and further various expenses, as set out in the Report, for bookcases and other fittings, for the internal warming, ventilating and lighting, and for providing the great clock and appendages, the expense of which could not then be ascertained, and which must have amounted to a very large sum of money.

It is clear from this Report, that My Lords were misled when they supposed that the original estimate comprised only the works for the mere shell of the building; that, on the contrary, it comprised the whole of the building, except the specified fittings. They are confirmed in this view by information derived by Mr. Hunt, the Surveyor of the Board of Works, who was at the time examined before a Committee of the House of Commons on the subject, and went in detail through the whole of the drawings and specifications, previously to the examination thereof by the Architects of the Board of Woods, &c.

My Lords also observe that the statement now furnished by Sir Charles Barry of the amount of the original Estimate is incorrect. The sum of 707,104 *l.*, which My Lords had taken as the amount, included indeed the addition of 10 per cent. for contingencies and professional charges; but if 5 per cent. were deducted therefrom, as the amount of architect's remuneration, the sum of 674,963 *l.* would remain as the amount of the original Estimate (independent of his own remuneration) prepared by himself, and verified by a professional gentleman employed by him. My Lords can only conjecture that Sir Charles Barry has arrived at the lower sum of 626,510 *l.*, which he now states to have been the original Estimate, by some such process as the following:

The amount as per abstract of bills was, as above stated,	£. 642,822
From this, deduct the value of old materials and other items	16,312
	£. 626,510

There can be no doubt, however, that an architect when paid by commission would be entitled to a per-centage on the whole expenditure without abatement. If, therefore, it had been intended to remunerate Sir Charles Barry by a per-centage on his estimate, the calculation would necessarily be made on the abstract of bills, with the addition of the usual allowance of 5 per cent. for contingencies, exclusive of professional charges.

My Lords can arrive at no other conclusion on this part of the question than that Sir Charles Barry has failed altogether to establish his position, that the remuneration of 25,000 *l.* awarded to him in 1838, amounted to 4 per cent. on the estimate then before the Board of Woods, &c.

My Lords, now advert to the correspondence which passed in the following year on the subject.

It appears that when the Commissioners of Woods, &c. came to the conclusion communicated in their Report to the Treasury, of the 20th February 1838, they had before them the detailed and verified estimates, from which they had reason to believe that the building would be completed for the sum stated, subject to such considerable additions as must be made according to the Report of their surveyors in respect to fittings and other works which had not been the subject of estimate. They, therefore, well knew the whole duty and labour which would devolve on the architect, and with this knowledge they stated their opinion, that "the sum of 25,000 *l.* would be a fair and liberal remuneration for the labour and responsibility to be imposed on Mr. Barry, in the *superintendence, direction, and completion* of the intended edifice." In the opinion of My Lords these terms are not susceptible of any other interpretation than that such remuneration was intended to cover every service which would devolve upon the architect in the *completion* of the building according to the estimates and specifications then before them, and the further contingent services; that it was proposed in lieu of the ordinary per-centage remuneration, and was intended to cover every charge, including that of measuring, which usually devolves on architects receiving such ordinary professional remuneration.

It is clear, also, that it was accepted by Sir Charles Barry on that understanding. When the Treasury Letter of the 25th February 1839 was communicated to him, he requested to be informed of the principle on which the proposed sum had

had been recommended, in order that he might offer the Board of Woods, &c. a few observations on the subject. This application having been refused by the letter of the surveyor of the Board of 4th April 1839, Sir Charles Barry addressed a letter to that officer on the 22d April 1839, in which he stated that he had no doubt that the proposed amount, *although far short of the customary remuneration which had hitherto been paid to architects for extensive works*, was considered by the Board to be liberal under all the circumstances of the case, and that with this impression, he had no wish to do otherwise than bow to its decision. He expressed at the same time his opinion that the amount was very inadequate to the great labour and responsibility that would devolve upon him in the superintendence, direction, and *completion of the intended edifice*, and his trust, that when that should be made manifest, there would not be any indisposition on the part of the Board to award to him the remainder of the remuneration which had hitherto been customary on similar occasions.

Three points are evident from this letter: 1st, That Sir Charles Barry accepted the proposed sum after a distinct refusal of explanation regarding the principle on which it was proposed; 2dly. That he was well aware at the time that it was far short of the customary remuneration to architects; and 3dly, That he also well understood that it was intended as the whole remuneration which he was to receive for the *superintendence, direction, and completion of the intended edifice.*

It is therefore too late for him now to raise questions regarding the principle on which the recommendation of the Board of Works in 1839 was based, and to found claims on the supposition that that Board had in view the payment to him of an amount equivalent to the customary remuneration of architects, when the only reservation contained in his letter of the 22d April 1839, was founded on the admitted fact that the proffered sum was considerably less than such an amount.

On reconsidering the whole circumstances, the only doubt which My Lords entertain, is, whether they have not taken too liberal a view of the considerations by which the Board of Woods, &c., were influenced when they recommended the payment of the fixed sum of 25,000*l.*; and whether, especially, in admitting Sir Charles Barry's claim to the payment of the expense of measuring, they have not gone beyond the intentions of the arrangement of 1839.

My Lords have, however, no disposition now to re-open this question, and they are prepared to give effect to the arrangement proposed in their Minute of the 29th January last. With this view they proceed to consider the Report of the First Commissioner of Works, of the 11th April last, regarding the two points which were reserved in that Minute for future settlement, viz.:

1st. The amount of remuneration for services rendered in the warming, lighting, and ventilating arrangements connected with the New Palace.

2d. The works upon which he should hereafter be allowed the commission of 1 per cent. on measuring.

On these two points the First Commissioner has made the following suggestions:

"As to the first point, I am of opinion that Sir C. Barry is entitled to "receive, as a remuneration for his services under that head, a payment of "4,925*l.*; and I arrive at this amount by allowing him 300*l.* per annum, from "January 1840 to April 1847, in respect of the preparation of plans and estimates "for the various schemes suggested by Dr. Reid, which were either abandoned or "greatly modified previously to carrying into effect the existing arrangements, "and 500*l.* per annum from April 1847 to November 1852, for a continuance "of the same duties, and also for taking charge of the warming, ventilating and "lighting apparatus throughout the entire building, with the exception of the "House of Commons."

"Upon the second point, I am of opinion that an allowance for measurement "of one per cent. should, for the future, be made only upon such accounts as "require the services of a surveyor for their preparation, unless the architect "should be authorised in writing by the First Commissioner of this Board, and "with the approval of your Lordships' Board, to make any special charge for "special services so authorised."

My Lords concur in these recommendations, and desire that the First Commissioner of Works will govern himself thereby. They will be prepared, in compliance

pliance therewith, to direct the issue to Sir Charles Barry of 4,925 *l.*, in full satisfaction of his claim for services connected with the warming, lighting and ventilating arrangements, and on the understanding that the whole principle of remuneration for his services is now finally settled, as defined by the Minute of 29th January last, and the further directions now given, and that in order to prevent any misapprehension as to the future, Sir Charles Barry will enter into an undertaking with the Board of Works to complete the buildings for the rate of commission and remuneration for measurement therein provided for.

In bringing this matter to a conclusion, My Lords feel it right to observe, with reference to statements which Sir Charles Barry has advanced in contravention of the grounds of the decision of this Board, that when their Lordships agreed to a payment being made to him at the rate of one per cent. for measuring, they had before them a report from the Board of Works, from which it appeared that, if the measuring were conducted under the direction of that Board, the remuneration to professional measurers for the work would be made "by a commission varying from one-half to three-quarters per cent." Their Lordships therefore consider, that in allowing him one per cent. he will be afforded ample remuneration for any duties imposed upon him personally in connexion with the service of measuring. Their Lordships have also to observe, that the principle proposed by the Board of Works, that the allowance for measuring should be made only on such accounts as require the services of a surveyor for their preparation, except under special circumstances, is not only right as respects works executed subsequently to the 2d October 1853, but would, in strictness, be applicable to past works. Their Lordships therefore feel that, in allowing him remuneration at the rate of one per cent. for measuring on the gross expenditure of 1,508,174 *l.* on account of works certified by him up to the 2d October 1854, they will have conceded payments to him considerably exceeding the sum to which he would have been entitled for the mere duty of measuring, and that that sum will afford full remuneration for all the extra services referred to in the Minute of this Board of 29th January last, excepting only those connected with services for warming, lighting, and ventilating, for which a special payment is now directed.

Their Lordships have before them a certified statement prepared in the Office of Works, from which it appears that the proportion of the said expenditure of 1,508,174 *l.*, which represent works which would not require the services of a measurer, is 215,000 *l.* Sir Charles Barry will receive under the arrangement sanctioned by this Board one per cent. on the latter sum, being 2,150 *l.* above the amount to which he would be properly entitled for the actual service of measuring; and they consider that a payment of that amount will afford him ample remuneration for all the undefined extra services referred to.

Transmit copy of this Minute to Sir Charles Barry for his information.

Transmit also copy thereof to the First Commissioner of Works for his information and guidance.

From Royal Institute of British Architects to *James Wilson*, Esq., M. P.

Royal Institute of British Architects,
16, Grosvenor-street, 9 July 1856.

Sir,

The attention of the Council of this Institute has been given for some time past to the correspondence between Her Majesty's Government and Sir Charles Barry, respecting his professional remuneration as the architect of the New Palace at Westminster, from its commencement to the present time, with especial reference to the principle involved therein.

After careful consideration, the Council deem it incumbent on them to forward you, in your official capacity, the following resolution, unanimously passed at their meeting on the 5th instant, as a protest against the course proposed to be adopted by Her Majesty's Government on this occasion.

"That 5 per cent. upon outlay has been, and is, the only rate of charge recognised by the profession, as fairly remunerative in the average practice of architects.

"That it is to be deeply regretted that it should be proposed to depart from the above rate in the instance of the New Palace at Westminster, a building, involving in its design and execution the exercise of the highest professional attainments.

"That the example which would be set by Her Majesty's Government, should the course proposed be carried into execution (a legal appeal against their decision being practically impossible), is to be regarded as disastrous to the future prospects of architecture as a liberal profession in this country, as calculated to lower the character of public monuments in England, and unworthy the Government of a great nation, whose obvious duty it is adequately to foster and protect the genius of its artists."

We are, &c.
(signed) *Charles C. Nelson,*
M. Digby Wyatt, } Hon. Secs.

From Sir *C. E. Trevelyan* to Sir *Charles Barry.*

Sir, Treasury Chambers, 10 July 1856.

The Lords Commissioners of Her Majesty's Treasury have directed me to transmit to you herewith, with reference to your letter of the 23d ult., copy of their Lordships' Minute, dated 4th instant, further on the subject of the remuneration to be allowed to you for your services as architect of the New Palace at Westminster.

See p. 9.

I remain, &c.
(signed) *C. E. Trevelyan.*

From *A. Austin*, Esq., to Sir *Charles Barry.*

Sir, Office of Works, &c., 12 July 1856.

I am directed by the First Commissioner of Her Majesty's Works, &c., to call your attention to the Minute of the Lords Commissioners of Her Majesty's Treasury, dated the 4th instant, a copy of which has been forwarded to you by their Lordships, and to request that you will be so good as to call at this office on Wednesday next at one o'clock, to enter into the arrangement set forth in that Minute, in relation to the rate of payment for your services.

I am, &c.
(signed) *Alfred Austin*, Secretary.

From *James Wilson*, Esq., to the Council of the Royal Institute of British Architects.

Gentlemen, Treasury Chambers, 15 July 1856.

The Lords Commissioners of Her Majesty's Treasury have had before them the resolution passed at your meeting on the 5th instant, on the subject of Sir Charles Barry's professional remuneration as the architect of the New Palace at Westminster, which were enclosed in your secretaries' letter of the 9th instant.

Although my Lords cannot recognise your right to call upon Parliament or Her Majesty's Government to conform to the regulations or opinions of the society, in arrangements which may be made with professional gentlemen undertaking public works, their Lordships are anxious that no misunderstanding should exist in the minds of the respectable body which you represent on the subject of the remuneration of Sir Charles Barry as architect of the New Houses of Parliament.

Their

Their Lordships have therefore directed me to transmit to you herewith the enclosed copy of their Minute of the 4th instant, in order that you may be informed of the views by which this Board has been governed in the matter.

You will learn from that Minute that this Board has not in its recent correspondence with Sir Charles Barry proposed any new principle with regard to the professional remuneration of architects employed on public works, but have, on the contrary, endeavoured to carry out in a liberal spirit an arrangement made in 1838, in consequence of opinions expressed in Parliament, and acquiesced in by Sir Charles Barry in the following year, as shown by the correspondence quoted in the enclosed Minute which took place in 1838 and 1839, and you will observe that the only objection then raised by Sir Charles Barry regarded the amount of remuneration proposed, and not the principle on which it was based. Their Lordships feel that you might, with greater propriety, call upon a member of your own body for an explanation of the motives by which he was governed, rather than address a remonstrance to Her Majesty's Government against the deviation, acquiesced in by him in 1839, from the rate of charge recognised by the profession.

(Treasury Minute of 4th July 1856, *see* page 9.)

I am, &c.
(signed) *James Wilson.*

From Sir *Charles Barry* to Sir *C. E. Trevelyan.*

Sir, Old Palace Yard, 15 July 1856.

I HAVE to acknowledge the receipt of your letter of the 10th instant, transmitting to me, with reference to my letter to Mr. Wilson of the 23d ultimo, copy of a further Minute of the Lords Commissioners of Her Majesty's Treasury, dated the 4th instant, relative to my remuneration as the architect of the New Palace at Westminster.

It is with the deepest regret and disappointment that I find their Lordships have put aside my proposal, to refer all matters in dispute between us to arbitration. Their Lordships must be perfectly aware that no individual in my position could with the least chance of success contend with the Government, and therefore that the power of decision virtually rests with themselves; but this very circumstance, I had hoped, would ensure their determination to refer the case to some authority the impartiality of whose decision could not be impugned.

However, as their Lordships have thought fit to determine otherwise, and as it is evident, from the tenor of their Minute of the 4th instant, that no further arguments in support of my claim could alter their determination, I have no course left but to yield to necessity, and accept the terms dictated to me; in effect, to submit to a sacrifice of what I fully believe to be fair and legitimate claims, amounting, exclusive of a large sum for interest on payments delayed, to 20,000*l.* at the least.

But while thus compelled to yield to the decision of their Lordships, I feel it due to myself and to my profession to state that I do not admit the fairness of the arguments, or the accuracy of the statements, upon which it is manifest this decision has been founded; and further, that after a reconsideration of the whole case, and especially of all the reasons which have been urged on the part of the Government, I remain firmly convinced that the arrangement forced upon me in 1839 has been entirely set aside by the non-fulfilment of any one of its conditions, and my claim ought in justice, to say nothing of liberality, to have been allowed in full.

With respect to the completion of the works in hand, I beg to add, that as every other architect employed on public buildings has been and is still being paid his full commission, nothing would induce me to continue my services upon the reduced rate of commission proposed, but the strong and natural desire I have to complete a work, which, by the devotion of so many years of labour and anxiety, I have endeavoured to render not unworthy of the country.

I am, &c.
(signed) *Charles Barry.*

From the Royal Society of British Architects to *James Wilson*, Esq., M.P.

Royal Institute of British Architects,
Sir, 16, Grosvenor-street, 24 July 1856.

We have to acknowledge the receipt of your letter of the 15th instant, informing the Council of the Royal Institute of British Architects that the Lords Commissioners of Her Majesty's Treasury have had before them the resolution passed unanimously at the Council meeting on the 5th instant, on the subject of the principle involved in the practice proposed to be carried out by Her Majesty's Government in respect to Sir Charles Barry's professional remuneration as the architect of the New Palace at Westminster.

We have further to acknowledge the receipt of a copy of my Lords' Minute of the 4th instant.

Both these documents will be submitted to the Council of the Royal Institute of British Architects at their next meeting; the correspondence embodied in the latter has, however, already been before them, and it was only after a careful examination of the whole of the Parliamentary Papers connected with the subject that the Council arrived at their own conclusions thereon, and framed and unanimously adopted the resolution in question.

We have, &c.
(signed) *Charles C. Nelson*, } Hon. Secs.
M. Digby Wyatt, }

NEW PALACE AT WESTMINSTER.

COPIES of further CORRESPONDENCE between the Treasury and Sir *Charles Barry*, respecting his REMUNERATION as ARCHITECT of the NEW PALACE at *Westminster*, up to the present Time (in continuation of Parliamentary Paper, No. 117, of the present Session).

(*Mr. Wilson.*)

Ordered, by The House of Commons, *to be Printed*,
25 *July* 1856.

405.

Under 3 *oz.*

NEW WESTMINSTER BRIDGE.

RETURN to an Order of the Honourable The House of Commons, dated 30 June 1856;—*for*,

COPY "of a REPORT presented to the First Commissioner of Public Works by Messrs. *Rendel & Simpson*, Civil Engineers, on the NEW WESTMINSTER BRIDGE."

COPY of a REPORT presented to the First Commissioner of Public Works by Messrs. *Rendel & Simpson*, upon the State of the NEW WESTMINSTER BRIDGE.

To the Right Honourable the Chief Commissioner of Her Majesty's Works and Public Buildings.

NEW WESTMINSTER BRIDGE.

Sir, Great George-street, Westminster, 28 June 1856.

IN accordance with the instructions conveyed in Mr. Austin's letter of the 31st of March last, we have the honour to submit our Report on the Works of New Westminster Bridge, now in course of erection.

The instructions which we received were given in the following terms:

"The First Commissioner requests that you will report to him upon the "following points:

"1. The cost of the works up to the date of your Report, or as near to "that period as you can.

"2. The progress which has been made in the work.

"3. The time in which the first half of the bridge may be made ready for "traffic.

"4. The time necessary for the completion of the whole structure, and its "probable cost under existing circumstances (also the probable cost of suitable "approaches).

"5. Your opinion as to the original scheme, and the exact nature of that "scheme; and,

"6. The desirability of proceeding with it.

"Should your opinion be unfavourable to the prosecution of the present plan, "I have to request that you will set forth most fully the reasons which induce "you to arrive at such a conclusion, and that you will advise as to the course "which you think it would be most desirable to adopt, taking into consideration "all the various circumstances of the case, and bearing in mind that the object to "be attained is to have a bridge of a permanent character."

And, First. As to the cost of the works up to the present time.

The payments on account of the new bridge to the 31st of May 1856, have been 76,988*l.* 12*s.* 9*d.* The details of these payments will be found in Appendix (A.)

Mr. Stephenson's valuation of the works executed, including miscellaneous items, materials delivered, and plant, amounts to 85,009*l.* 1*s.*: *vide* Appendix (B.)

Second. The progress made with the works is as follows.

At the Middlesex abutment, the extension and cutwater of No. 3 pier of the old bridge, which came in the way of the new works, have been removed; the iron and timber piling has been completed, the lower tie bars secured, the granite slabs

set in their places, and the whole filled in with concrete to about one foot above low water level.

The foundations of the west ends of the wing walls on both sides of the bridge have been put in for 110 feet in length, and brought up with concrete to within six feet of high water, at which level the brickwork is to be commenced.

For No. 1 pier the ground has been dredged, and 58 bearing piles were in progress of being driven when the works were stopped.

For No. 2 pier the bearing and cast-iron piles and plates have been driven, the lower tie-bars secured, the granite slabs set, and the interior of the pier filled with concrete to about the level of low water. The stoppage of the works prevented the concrete being completed.

At No. 3 pier the extension and cutwater of No. 7 pier of the old bridge occupied the site of a portion of the new pier. These have been removed, and the elm piles of the new pier are driven, as also are 14 of the cast-iron round piles, and 13 of the plate piles.

In No. 4 pier the bearing piles, the cast-iron round piles, and the plate piles have been driven, the tie-bars to the plates and piles secured, and the granite slabs set, as also are the stone caps on the bearing piles. The interior of this pier is filled with concrete up to the line for the granite course.

The position of No. 5 pier is in a line with No. 10 pier of the old bridge. It was therefore necessary to remove the old cutwater, which has been effected, and the bearing and cast-iron piles and plates are partially driven, and a portion of the lower tie-bars are put down, but require screwing up.

At No. 6 pier the bearing piles have been driven; also 20 cast-iron piles and 18 of the plates; and some of the lower tie-bars are in their places, but are not yet finally secured.

At the Surrey abutment the extension and cutwater of No. 13 old pier has been removed, and all the bearing piles, with one exception, are driven. The cast-iron piles and plates are also driven. The foundations are dredged out, and, for a length of 80 feet, are filled in with concrete to the level of low water. The invert of one of the three small arches has been put in, and the masonry and brickwork forming the abutment between this invert and the shore raised to five feet above low water.

Some sheet piling has been driven in the north end of the small arch of the old bridge, and the space under this arch has been dredged out and filled in with concrete to the level of low water.

As regards the iron superstructure, about 750 tons of cast-iron and nearly 600 tons of wrought, or about one-third of the total quantity required for the bridge, have been delivered at the Commissioners' wharf at Battersea, and are at the present time in a more or less finished state. A considerable quantity has been fitted together, preparatory to fixing it *in situ*.

For a statement in detail of the amount of work executed in the foundations, we beg to refer you to Appendix (C.), which shows the quantity of work required for half the bridge, the portion of the same that has been executed, and the materials that have been delivered.

Third. As regards the time in which the first half of the bridge may be made ready for traffic.

From the best estimate we can form, we are of opinion that this portion of the bridge will occupy 18 months from the resumption of operations.

Fourth. As to the time necessary for the completion of the whole structure, and the probable cost of the bridge, with its approaches.

Supposing the arches of the old bridge, and so many of its piers and their foundations as interfere with those of the new one, to be entirely cleared away in 18 months from the opening of the first section of the new bridge, which we think is the least time that so difficult and tedious an operation could be performed in without the aid of cofferdams, then we consider that the whole of the new bridge might be completed in two years and a half from such removal of the old one.

As

As regards the cost of completing the present plan :—

	£.	s.	d.
The sum at which the bridge was originally contracted for by Mr. Mare, was - - - - - - - - - -	206,438	–	–
To this there must be added, for the concrete, dredging, and fenders outside the piers, as estimated by the engineer -	10,790	–	–
There has also to be added the engineer's estimate of the extras which would have arisen under Mr. Mare's contract, say -	7,000	–	–
Making the total present estimated cost of the bridge - £.	224,228	–	–
Of this sum there has already been expended in the works of the foundations, under the contract, as per Mr. Stephenson's valuation, Appendix (B.) - - - - - - -	26,096	11	1
And according to the same valuation, there would seem to be provided materials (exclusive of plant) for the bridge to the amount of - - - - - - - - -	28,957	3	–
Making a total effective expenditure towards the construction of the bridge of - - - - - - £.	55,053	14	1

And therefore leaving yet to be expended upon it, after the settlement of the present contract, and according to its estimated cost, 169,174*l.* 5*s.* 11*d.* This sum will, however, be reduced by the amount of the value which it may be arranged with any incoming contractor to put on the plant already provided, and which is estimated by Mr. Stephenson at 23,885*l.* 16*s.* 6*d.* (*Vide* Appendix (B.), item 3.)

We confess, however, our doubts of a safe contract being obtainable for the completion of the works for this sum. We also think that there is great doubt as to the practicability of safely founding the new piers on the sites of the old ones, without very considerable difficulty and expenditure, not provided for in the above estimate, in the removal of the old foundations and stone deposits.

The extra cost of these and other difficulties which we think will arise in the completion of the new foundations, we feel it impossible to estimate with any degree of accuracy ; but if it be necessary to name a sum which will, in our opinion, approximate to the cost of meeting these difficulties, we should fix it at not less than 25 per cent. on the original estimate above given for completing the bridge, from the conclusion of the existing contract (169,174*l.* 5*s.* 11*d.* less as before stated), or say 40,000*l.*

With respect to the probable cost of suitable approaches, we have consulted Mr. Pennethorne, and annex hereto the estimates he has furnished to us [*vide* Appendix (D.), with correspondence forming Appendix (E.)], from which it will be seen that the cost of the approaches for a bridge 85 feet wide is estimated as follows :

	£.
For property on the Middlesex side - -	232,800
For property on the Surrey side - - -	152,000
TOTAL - - - £.	384,800

In which sum are included 70,000*l.*, the value of the property already belonging to the Bridge Estate, and 170,000*l.* for clearing the block of houses on the south side of Bridge-street, to obtain a site for additional buildings for the Houses of Parliament.

Fifth. As to our opinion of the original scheme, and the exact nature of that scheme.

The new bridge is to occupy the site of the present. It is, however, to be of double the width, the addition being wholly on the south side, with a view to the completion of that half before the old bridge is removed ; thus avoiding the necessity for a temporary bridge pending the construction of the new bridge on the site of the old one.

Again,—the present scheme is devised with a view to the avoidance of the use of cofferdams or caissons for founding the piers and abutments. This is done by forming the piers below low water of a series of wooden piles, surrounded by a sheeting of cast iron, the space inclosed by this sheeting being filled in with concrete.

With a view to prevent the cast-iron piles being laid bare by the scour of the river beyond a fixed limit, namely, three feet below low water, it is proposed to surround them up to that height with a bank of concrete; and in order to guard the piers, masonry, as well as cast-iron piling, from accident by the fouling of barges, steamers, or otherwise, they are to be protected by floating fenders or booms.

That the mode of forming these important portions of the piers and abutments may be clearly understood, we attach a general drawing to illustrate the following detailed description:—

Under each pier there are to be driven 145 elm piles, chiefly in rows of three and five alternately. All these piles are intended to carry an uniform load; and to obtain the degree of resistance which is regarded as sufficient for that load, they average 30 feet in length, and are driven about 17½ feet into the solid London clay, which is here said to lie at a depth of from 28 to 32 feet below Trinity high water, with an uniform surface.

The cast-iron piles are, as will be seen by the drawing, of two kinds; namely, hollow round piles, 15 inches diameter, with two grooves cast in them opposite each other, and plate or flat piles, cast with flanges to strengthen them. These two kinds of piles are placed alternately, the plate piles being driven down after the round piles between the grooves, described as cast in the latter; and thus it is proposed to enclose within an iron case, not only the wooden piles and concrete deposited inside the piers, but also the bed of the river, gravel and clay, to the depth to which the plate piles are driven; that is, to 21 feet below low water.

The next operation is the removal of the loose mud and sand from the inclosed space down to the gravel. The opposite cast-iron piles are then united by strong wrought-iron tie-bolts in two tiers, and this done by the aid of the diving dress; the next and final step in the completion of the work up to low water, is the deposit of the concrete between all the iron and wood piles from the gravel up to that level. We should, however, explain, that the heads of the cast-iron plate piles are driven six feet below low water, whilst those of the round piles stand one foot above low water. The spaces thus occasioned in the iron casing are filled up with granite slabs 18 inches thick, the lower end of the slabs resting on the head of the plate piles, and the upper standing two feet above low water, ready to receive the first course of masonry.

These several works completed, the wooden piles are cut off to an uniform level of six inches above low water; a block of stone 18 inches thick and four feet area is solidly bedded on the head of each bearing pile; the spaces between these blocks are filled in with concrete, and the whole surface of the piers, including the granite slabs, is levelled off to the height of two feet above low water, to receive the first course of masonry.

Above this first course of masonry, which is of solid granite, two feet thick, the piers are to be faced all round with granite, backed by brickwork; the latter not solid, but having cross walls about 2 ft. 3 in. thick in the line of each of the iron ribs of the superstructure. The spaces between these cross walls are filled with concrete.

The masonry of the piers is terminated two feet above Trinity high-water line, from which level the iron superstructure of the arches is commenced.

There are to be seven of these arches, namely, two next the abutments,

	ft.	*in.*	
on either side of the river, of - - - -	94	9	span.
Two next these, of - - - - -	104	6	„
Two next the last, of - - - - -	115	0	„
And a centre arch, of - - - -	120	0	„

Each arch is to consist of 15 ribs, and each rib is formed in five segments.

The centre segment, except in the external ribs, is to be made of wrought iron, and varies from 40 ft. to 52 ft. 3 in. in length; from 22 inches to 28 inches in depth in the middle; and in sectional area from 47 to 60 square inches, according to the span of the arch.

The two external or face ribs are intended to be wholly of cast iron, and to otherwise

otherwise differ from the internal ribs, with a view to their being formed in the ornamental character of the general design.

The roadway is to be carried on thin wrought-iron plates, bent or buckled to increase their stiffness, in the manner lately patented by Mr. Mallett of Dublin. The plates cover the whole of the superstructure

Over the plates there is to be laid a kind of bitumen concrete, to make an uniform and water-tight surface for the carriage and foot pavements. The latter are to be formed 15 feet wide each, and flagged with "Hopton Wood" stone; the former is to be 53 feet wide, and paved with "Mount Sorrel" granite, four inches thick, set in bitumen. The roadway over the abutments of the bridge is to be formed of 12 inches of concrete, covered with three inches of asphalte, on which the granite paving is to be laid.

It is intended to divide the carriage-way by a fence, extending from end to end along its centre, into a going and a coming road, and in each division there is to be a tram, partly of granite and partly of iron, for the heavy traffic.

In completion of this description, we have to add that it is intended to dredge the channel of the river out between each arch to a regular curve, commencing at three feet below low-water at the piers, and laying bare the clay in the centre, which would give a low-water depth at that point of about 12 feet. Further, it is intended to dredge out the gravel down to the clay, all round the piers, for a width of about six feet, and to fill in the space so dredged with concrete.

By the above general description of the bridge as now executing (we say as now executing, because it differs considerably in several respects from the contract plans), it will be readily understood that, assuming for the present the sufficiency of the masonry and iron of the bridge a matter easily determined, the permanent character of the bridge will depend on the soundness of the foundations below low-water.

It will have been gathered from the foregoing description and the annexed plan, that these portions of the bridge are dependent on the combined action of several classes of materials, differing in their strength, as well as in the manner in which they are applied. Further, the strength of each part is liable to suffer by the failure of any one, and in especial the fracture or the improper execution of any portion of the outer cast-iron casing might be productive in the end of very serious results. In fact, supposing the principle on which these foundations are constructed to be a sound one, it is one that peculiarly requires a cofferdam; for this alone would ensure that careful supervision which is demanded by a class of work dependent for its permanence on its faultless execution. Again, we cannot but think it probable that the bottom of the river will not retain the peculiar form intended to be given to it: should this be the case, the concrete banks round the piers must in no long time be broken up, and the piers be weakened, first, by the increase of their unsupported height, and, secondly, by the diminution of the depth and solidity of the material through which the piles of which they mainly consist are driven.

As regards the economy of money and time that will result from the mode in which a temporary bridge is dispensed with, the question depends on the difficulties that may be found in the building of the new bridge in parts, and the precautions necessary to such a mode of construction in providing against accidents to both structures; the extent of these difficulties and precautions is of course greatly increased by the character of the original construction of the old bridge, by its settlements at different times, and still more by the disturbance which the various means resorted to during the last 18 years to secure it, have occasioned to the bed of the river.

Now, whilst we cannot but regard the efforts of the engineer of the new bridge to avoid the cost of a temporary bridge and of cofferdams as laudable, and exhibiting a marked disregard of personal trouble and anxiety, we feel obliged to state, that, looking to the changes which have taken place in the bed of the Thames, through London, since the removal of old London Bridge, and to the well-known effect which these changes have produced on the foundations of the several bridges, and especially to the great disturbance which the bed of the river at the site in question has undergone in the various attempts to keep up the old bridge, we say, having regard to these facts, so material to the question of how the foundations of the new bridge can be most completely placed beyond the reach of accident, we do not feel that the present, or any plan which does not comprise solid stone piers and abutments, carried down deep into the London clay, can be regarded as possessing a "permanent character." We are further of opinion that this is a case specially demanding the aid of cofferdams, not only that the site of the new piers

may be laid open to view, as well as their foundations be laid at a sufficient depth, but also for the better, cheaper, more expeditious and safer removal of the arches and foundations of the old bridge; a matter important alike to the safety of the piers of the new bridge, and the early improvement of the navigation of the river.

We are also of opinion, that the saving of the cost of a temporary bridge is not a sufficient compensation for the trouble, delay, risk, and extra cost consequent on the construction of the bridge in even two sections as now proposed, and the first in such close proximity to the old bridge. Should the present design be prosecuted, we recommend that the foundations, masonry, and iron superstructure, except the plates which carry the roadway of the two sections, should be built entirely independent of each other, so as to reduce the consequences of unequal settlements in them to the least possible evil.

We come now to the sixth and last article of your instructions, and your concluding remarks thereon.

We have before reported that the liabilities on the works, stock, plant, &c., up to this time amount to 85,009 *l.* 1 *s.*, and that of this sum 26,096 *l.* 11 *s.* 1 *d.* have been expended on permanent works in the portion of the foundations now formed, which amount, as well as an additional sum of 6,069 *l.* 10 *s.* 5 *d.* incurred for various contingencies, would of course be sacrificed if the plans are altered. We also consider that of the balance, namely, 52,842 *l.* 19 *s.* 6 *d.* expended on stock and plant, a loss of about 10,000 *l.* would occur from change of plan, making the total loss on works from such change about 42,000 *l.*

If the piers of the new bridge were founded in the clay 38 feet, and its abutments 35 feet below Trinity high-water, and on proper footings, and within cofferdams that would at the same time admit of the safe removal of the foundations of the old bridge, then we estimate the cost of the new bridge (85 feet wide) at - - - - - - - - - - - - £. 326,000

But from this we must deduct the value of the materials removed from the old bridge and worked up in the new, which we estimate at - - - - - - - - - £. 15,000		
And also the value of plant and material provided for the present after adaptation to the new plans, say -	42,000	
Making a total deduction of - - - - - - -		57,000
And leaving as the further cost of the new bridge itself - -		269,000
But to this sum there must be added the cost of a temporary bridge, which, including maintenance for, say four years we estimate at		35,000
Making the total further cost of the new bridge, including the provision for the traffic during its construction - - - -		£. 304,000

The cost of the approaches will obviously be the same, whichever plan be executed.

We beg to state, that the above estimate includes the cost of the removal of the old bridge, also some additions to the thickness of the piers, and to the strength and stiffness of the iron superstructure. It also includes the cost of thicker roadway plates, and the substitution of the best and strongest kind of granite paving for the four inch "Mount Sorrell" granite, which we regard as much too light for the traffic; and though we have not felt justified in preparing costly drawings and detailed estimates, we have taken such precautions as leave no doubt in our minds that the sum of 304,000 *l.* will cover the total cost of the bridge from the present time, and the necessary provision for the traffic during its construction.

We are, however, of opinion that it is a matter for grave consideration, whether the traffic between the two sides of the river is not so large and so rapidly increasing, that the diversion of a portion of it to the neighbourhood of the district from whence the increase is most prominent, will not shortly be necessary. We regard the present as a most favourable time for considering this project (often made before), because the natural and most convenient site for another bridge is at once sufficiently near to Westminster to allow of its answering the purpose, and, therefore, saving the cost of a temporary bridge during the rebuilding of Westminster

Westminster Bridge, and sufficiently distant for the convenient division of the traffic when the two bridges should be completed.

We would call attention to the fact, that even at present, the approach to the Houses of Parliament is rendered most inconvenient by the crowd of traffic to and from Westminster Bridge, which, it must be remembered, is the only free bridge above Blackfriars; that, in short, the crossing in Bridge-street is even now frequently dangerous; and there cannot be a doubt that the traffic from Chelsea, Pimlico, Belgravia, and southern Westminster generally, seeking an outlet to the East, will year by year increase. The result of such increase cannot but be to add to the confusion and danger of the Bridge-street crossing, and the remedy for it would seem to be rather the dispersion of the traffic by the provision of two bridges, than its concentration by the doubling of the present one at Westminster.

It has several times been proposed to divide this traffic by the construction of a toll bridge from Horseferry-road across the river to Church-street, Lambeth; but the project has been unsuccessful, because it has been considered, and rightly, we think, that with a free bridge so near, few persons would cross a bridge where a toll was taken.

There can be no doubt, however, that if a free bridge was constructed on this site, the diversion of traffic from Westminster Bridge, which it would occasion, would be so great as to admit of the reduction of the width of the new bridge at that point, from 85 feet to 60 feet, which is still six feet six inches greater than the width of London Bridge; and, therefore, in examining the question of cost, we must credit the Lambeth Bridge, not only with the cost of the temporary bridge, but with the saving in the cost of the new bridge at Westminster, by the reduction of its width and approaches 25 feet.

Believing then, for the foregoing reasons, that this was a matter most material to the whole inquiry entrusted to us, we have carefully examined the river and districts on each bank between Westminster and Vauxhall. The result is, that we find that the old Horseferry, between the Horseferry-road, on the Middlesex side of the river, and Church-strreet, Lambeth, on the Surrey side, forms a perfectly eligible site for a bridge, and that suitable approaches may be made on each side of the river at a comparatively moderate cost.

For your general information, we attach a Plan (No. 5), showing the extent of the approaches, and a section representing the gradients, which, as you will observe, would nowhere exceed 1 in 50.

We consider that a bridge on this site should, like the new Westminster Bridge, be founded deep in the London clay on solid stone piers, with (on account of the lowness of the streets) an iron superstructure; but that in place of seven arches, as settled for Westminster Bridge, it should have five; the clear water-way and headway for navigation being the same as for Westminster, and the roadway and approaches 60 feet wide.

The cost of such a bridge on this site we estimate at 240,000*l.*, and we consider that its erection would occupy four years. As stated, however, in the case of the modified design for Westminster Bridge, we have not felt justified in making the detailed drawings necessary for an accurate estimate; but we believe that the one above given is so nearly approximate, that there need be no hesitation in considering the expediency of constructing such a bridge, on the ground of want of information as to its cost.

In order that we might be able to place before you the whole question of the cost of this bridge, we acted on your general authority in calling on Mr. Pennethorne to value the property that would have to be taken to make the requisite approaches to it.

Accordingly we were furnished by that gentleman with two estimates (*vide* Appendices (G.) and (H.). The former of these had reference to a plan proposed some time ago, and includes a larger amount of property than we should propose to deal with; the latter provides approaches 60 feet wide, and is in all respects such as we feel justified in recommending for adoption, should the erection of the bridge be determined on.

By reference to Appendix (H.), it will be seen that the approaches would probably cost—

	£.
On the Middlesex side	90,000
On the Surrey side	74,500
Or, in all	164,500
This sum is inclusive of the cost of making the approaches; but there are other works necessary, which we estimate at	10,500
So that the Total Estimate for the Approaches is	175,000
The Total Cost of the Bridge and Approaches we therefore Estimate at £.	415,000

But we have before stated that we bring forward this proposition at the present time on the ground of the ultimate saving in cost that would result from the immediate construction of this bridge, owing to the reduction that might be made in the width of Westminster Bridge and its approaches, and to the avoidance of a temporary bridge; and we have therefore now to consider the probable cost of such bridge at Westminster, and the consequent probable saving.

The cost of the bridge made 60 feet wide, and constructed in all other respects like the 85-feet bridge, we estimate under the same reservation; and making the same allowance for the materials of the old bridge, and the materials already provided for the new one (in all, 57,000 *l.*), at 218,000 *l.*; and it might be completed in five years.

We have also obtained from Mr. Pennethorne estimates of the cost of providing approaches for this bridge (*vide* Appendix (F.), by which we find that—

	£.
The Middlesex approach would cost	170,000
And the Surrey approach	95,000
Or, both together £.	265,000

But it must be observed, that the cost of the Middlesex approach is incurred entirely for the removal of the block of houses on the south side of Bridge-street, which, as before stated, are necessary for the extension of the Houses of Parliament; and further, of the 95,000 *l.*, the estimated cost of the approaches on the Surrey side, 22,000 *l.* are for property already belonging to the Bridge Estate.

Leaving, however, out of account these facts, the estimate for the bridge at Westminster would stand as follows:

	£.
For the bridge	218,000
For its approaches	265,000
TOTAL £.	483,000

The saving, therefore, that would be effected by the immediate construction of the Lambeth Bridge, instead of its being deferred to a future, but we feel satisfied no distant date, would be as follows:

	£.
In the bridge at Westminster	51,000
In the approaches to it	119,800
In the temporary bridge	35,000
TOTAL £.	205,800

which, if put in abatement of the cost of the Lambeth Bridge, would reduce it from 415,000 *l.* to 209,200 *l.*, or say 210,000 *l.*

We should remark here, that all the estimates given for the approaches are based on the supposition that all spare land shall be disposed of, and its produce

go

go in abatement of the original purchase account. This is clearly shown in the Appendices containing Mr. Pennethorne's different valuations.

On the subject of the condition of the present bridge at Westminster, we do not feel it necessary to say anything, further than that we believe it capable of accommodating the traffic, pending the construction of the bridge at Lambeth.

We have only to add to the body of our report, that we attach to it five plans for the better elucidation of our views.

No. 1. Is a plan, elevation, and section of one pier of the design lately in course of execution.

No. 2. Shows the bridge at Westminster as authorised, and also one at Lambeth of the same width, and illustrates the valuations given in Appendices (D.) and (G.)

No. 3. Shows the site proposed by us for the Westminster Bridge, if its width should be reduced to 60 feet, and illustrates Appendix (F.)

No. 4. Shows the bridge proposed by us at Lambeth, and illustrates Appendix (H.)

No. 5. Shows a section along the centre of the Lambeth-bridge and its approaches, extending from the Engine-house in the Horseferry-road to the Railway Arch in Church-street, Lambeth.

In conclusion of our report, we beg to present in as concise a form as possible the facts and opinions before given in detail. These are—

First. That the liabilities for works incurred on account of the new bridge have been, up to the present time, 85,009 *l.* 1 *s.*, of which sum 26,096 *l.* 11 *s.* 1 *d.* are on account of works in the foundations, and 52,832 *l.* 19 *s.* 6 *d.* for materials and plant delivered. The balance is for contingencies of various kinds.

Second. That the proportion of the foundation works of the entire bridge executed may be regarded as equal to about one-fourth of the whole, and that about one-third of the ironwork of the superstructure is delivered, and more or less fitted together on the Commissioners' Wharf at Battersea.

Third. That the completion of the first section of the new bridge will demand at least 18 months from the time of active resumption of the works.

Fourth. That the time necessary for the completion of the second section of the bridge cannot be estimated at less than four years from the opening of the first section; that the cost of completing it cannot be estimated at less than 200,000 *l.*, and that the probable cost of suitable approaches will be 384,800 *l.*, making a total of about 584,800 *l.*, or say 585,000 *l.*; of which, however, 70,000 *l.* are for property already belonging to the Bridge Estate, and 170,000 *l.* for clearing away the block of houses on the south side of Bridge-street.

Fifth. That the original scheme is, in our opinion, defective in many of its details, more especially in the construction of the piers below low water.

Sixth. That it will be prudent, in our opinion, to retain the site of the bridge, and, if a width of 85 feet is considered necessary, its general arrangement; but that the details of the design should be modified; and that, in particular, the piers and abutments should be of solid stone, carried down deep into the London clay.

Seventh. That the probable further cost of the bridge on such modified plans would be—

	£.
For the bridge - - - - - - - - -	269,000
For a temporary bridge - - - - - - -	35,000
For the approaches - - - - - - -	384,800
TOTAL - - - £.	688,800

Eighth. That we think the present a most favourable time for your considering whether, instead of concentrating on the approaches to this bridge the large traffic which alone could justify the width proposed for it (85 feet), it would not be more to the public advantage, both presently and prospectively, to build, as so frequently suggested, a second bridge, 60 feet wide, from the Horseferry-road

across to Lambeth, reducing to the same width the new bridge at Westminster, and avoiding the cost of a temporary b ridge.

Ninth. That such bridge at Lambeth may be built in four years, and at a cost of—

	£.
For the bridge - - - - - -	240,000
For its approaches - - - - -	175,000
Or, in all - - - £.	415,000

Tenth. That a bridge, 60 feet wide at Westminster, might be constructed, making the same allowances for plant and materials already belonging to the Commissioners, and for the materials of the old bridge, as in the case of the 85 feet bridge, for - - - - - - - - - - - £.218,000
And that its approaches might be obtained for the sum of - - 265,000

Making the total cost of the bridge from the present time - - £.483,000

This sum, however, includes 22,000 *l.*, the value of property already belonging to the Bridge Estate, and 170,000 *l.*, the estimated value of the property on the south side of Bridge-street.

Eleventh. That the saving of expense by the construction of a bridge 60 feet wide at Westminster would be—

	£.
For the bridge - - - - - -	51,000
For the approaches - - - - -	119,800
Or, in all - - - £.	170,800

And that this sum, together with the saving effected by the avoidance of a temporary bridge, which we have estimated at 35,000 *l.*, placed to the credit of the Lambeth Bridge, would reduce its cost from 415,000 *l.* to, say, 210,000 *l.*

Finally, we cannot but express our obligations to Mr. Page and Mr. Pennethorne for the ready manner in which they have afforded us their valuable assistance whenever it has been necessary to our inquiry.

We have, &c.
(signed) *Jas. M. Rendel.*
James Simpson.

APPENDIX (A.)

PAYMENTS on account of New Westminster Bridge to 31st May 1856.

			£.	s.	d.
Under contract - - - - - - - - - - - -			59,982	15	4
For professional services of engineer and staff during contract:					
Engineer - - - - - - -	£. 4,462	3 11			
Staff - - - - - - - - -	1,264	7 4			
			5,726	11	3
Other payments - - - - - - - - - - - -			8,866	17	10
Payments preliminary to the contract:					
Engineer - - - - - - -	£. 1,014	18 4			
Other payments - - - - - -	1,397	10 –			
			2,412	8	4
		£.	76,988	12	9

APPENDIX (B.)

MR. STEPHENSON'S Valuation of the Works at the New Westminster Bridge.

	£.	s.	d.
Bill No. 1.—For permanent works examined and approved by the engineer	26,096	11	1
Miscellaneous items	6,069	10	5
Bill No. 2.—For materials delivered and approved by the engineer	28,957	3	–
Bill No. 3.—For plant provided	23,885	16	6
£.	85,009	1	–

APPENDIX (C.)

DETAILS OF PROGRESS.

TABLE showing Works required for Half the Bridge, and Proportion of the same executed.

	Middlesex Abutment.	PIERS. 1.	2.	3.	4.	5.	6.	Surrey Abutment.	Total.	To be Executed.
Number of iron piles required	13	23	23	23	23	23	23	15	166	
Ditto, now driven	12	0	21	14	21	21	20	14	123	
										43
Number of iron plates required	12	22	22	22	22	22	22	14	158	
Ditto, now driven	11	0	20	13	20	20	19	13	116	
										42
Number of elm piles required	119	75	75	75	75	75	75	127	696	
Ditto, now driven	110	58	67	67	67	67	68	113	617	
										79
Mem.—The piles to piers 1 & 6 are not driven to the full depth.										
Number of granite stones between piles required	12	22	22	22	22	22	22	14	158	
Ditto, now fixed	11	0	20	0	20	0	0	0	51	
										107
Number of lower tie bars required	24	44	44	44	44	44	44	28	316	
Ditto, now fixed	22	0	44	0	44	16	10	13	149	
										167
Number of upper ditto required	17	17	17	17	17	17	17	17	136	
Ditto, now fixed	0	0	9	0	15	0	0	0	24	
										112
Bradford landings required for ditto, feet superficial, about	228	70	70	70	70	70	70	228	876	
Ditto, executed	114	0	34	0	70	25	0	53	296	
										580
Concrete required to the level of top of string course about yards cube	1,500	180	180	180	180	180	180	1,400	3,980	
Concrete executed	1,150	0	128	0	160	0	0	1,182	2,620	
										1,360
Stone blocks over heads of piles about feet cube	600	400	400	400	400	400	400	600	3,600	
Ditto, executed	0	0	0	0	370	0	0	0	370	
										3,230

Materials Provided.

Number of elm piles on the ground	76
„ iron ditto „	20
„ iron plates	181
Number of lower tie-bars	None made, but some screwed ends, &c., partly made, and a large quantity of iron provided.
„ upper „	
Number of stone blocks for heads of piles	None. A quantity of new stone for this purpose has been delivered since the works were stopped, but not brought into account.
Number of granite stones between piles, unprepared	76

	Cube ft.	*Cube ft.*	*Cube ft.*
Quantity of granite plinth required for half the bridge, about		13,900	
Quantity on the ground:			
Prepared	5,974		
Unprepared	982		
Backing for ditto	2,074		
		9,030	
Leaving to be provided			4,870
Quantity of granite ashlar required for face of piers and abutments to half the bridge, about	10,303		
Quantity of granite bed-course for iron ribs	3,070		
		13,373	
Quantity of granite ashlar provided for the above:			
Prepared	9,066		
Unprepared	1,831		
		10,897	
Leaving to be provided			2,476
Quantity of Bramley Fall stone required for face of piers and abutments to half the bridge	11,130		
Quantity of Bramley Fall bed-course for iron ribs	2,854		
		13,984	

Quantity of Bramley Fall for the above:	*New.*	*Old.*		
Prepared	6,687	3,459	17,766	
Unprepared	3,101	4,519		
Leaving towards the second half of the bridge				3,782

Cast Iron Work.

Nothing provided for the outer Rib except the Bed-plate.

Number of bed-plates required for half the bridge, say equal to		21	
„ on ground		18	
			3
All the bed-plates have been planed and prepared for fitting, except for the outer rib.			
Number of abutment castings required		98	
„ on ground	37		
„ prepared for fitting	17		
„ fitted and erected temporarily	34		
		88	
			10
Number of lower parts of ribs required		98	
„ on ground	9		
„ prepared for fitting	26		
„ fitted and erected temporarily	30		
		65	
			33

Number of upper parts of ribs required - - - - - -		98	
„ on ground - - - - - - - - -	9		
„ prepared for fitting - - - - - - - -	1		
„ fixed and erected - - - - - - - -	10		
		20	
			78
Number of spandril pieces required - - - - - -		98	
„ on ground - - - - - - - - -	35		
„ fitted and erected - - - - - - - -	30		
		65	
			33
Number of upright pieces in abutments - - - - - -		98	
„ on the ground - - - - - - - -	63		
„ prepared for fitting - - - - - - - -	5		
„ fitted and erected - - - - - - - -	30		
		98	
			0
Number of longitudinal girders - - - - - - -		98	
„ on ground - - - - - - - - -	59		
„ prepared for fitting - - - - - - - -	18		
„ fitted and erected - - - - - - - -	16		
		93	
			5
Number of braces - - - - - - - - -		392	
„ on ground - - - - - - - - -	210		
„ fitted and erected - - - - - - - -	16		
		226	
			166
Number of diagonal braces - - - - - - - -		84	
„ on ground - - - - - - - - -	8		
„ fitted and erected - - - - - - - -	8		
		16	
			68
Number of cross girders - - - - - - - - -		1,232	
„ on ground - - - - - - - - - -		296	
			936
WROUGHT IRON WORK:			
Number of ribs required for half the bridge - - - - -		49	
„ provided - - - - - - - - - - -		33	
			16
Number of buckled plates required - - - - - -		2,430	
„ of plates provided, but not buckled - - - - -		1,421	
			1,009

Of these plates, which are quarter inch thick - 52 are 5 ft. 3 in. by 2 ft. 8 in.
152 are 4 „ 3 by 3 „ 1
1,217 are 5 „ 3 by 3 „ 1

MATERIALS (not before mentioned) now on the Ground.

5,700 feet superficial 9-inch Bradford stone landings.
1,157 feet super. 15-inch ditto.
About 375 tons of iron for ribs.
„ 9½ tons rivets.
A large quantity of round, flat, square, and angle iron.

APPENDIX (D.)

MR. PENNETHORNE'S ESTIMATE of Cost of Approaches to New Westminster Bridge. *Vide* Plan No. 2.

No. 1.—COST of forming Approach on the Surrey side.

	£.	£.
Purchase of property, coloured red on Plan, including the interest of both freeholders and leaseholders	110,000	
Compensation to occupiers for goodwills, fixtures, removals, expenses, &c.	45,000	
Building vaults, forming and paving streets, &c.	5,000	
	160,000	
Add, for the general expenses of the undertaking and contingencies, but exclusive of interest of monies borrowed or expended 15 per cent.	24,000	
Gross Outlay		184,000
Ground rents upon lands to be let for building purposes, say 1,200 *l.* per annum, at 25 years' purchase	30,000	
Old materials	2,000	
Return		32,000
NET OUTLAY £.		152,000

No. 2.—COST of forming Approach on the Middlesex side.

	£.	£.
North side of Bridge-street:		
Purchase of properties, coloured red on Plan, including the interest of both freeholders and leaseholders	45,000	
Compensation to occupiers for goodwills, fixtures, removals, expenses, &c.	15,500	
		60,500
South side of Bridge-street:		
Purchase of properties, coloured red on Plan, including the interest of both freeholders and leaseholders	106,000	
Compensation to occupiers for goodwills, fixtures, removals, expenses, &c.	50,000	
		156,000
Building vaults, forming and paving street, &c.		2,000
		218,500
Add, for the general expenses of the undertaking and contingencies, but exclusive of interest of monies borrowed or expended 15 per cent. say		32,500
Gross Outlay		251,000
Ground rents upon lands to be let for building purposes, say 700 *l.* per annum, at 25 years' purchase	17,500	
Old materials	700	
Return		18,200
NET OUTLAY £.		232,800

SUMMARY.

		£.
Net Outlay:	Approach on Surrey side - - - -	152,000
Ditto -	Approach on Middlesex side - - -	232,800
	£.	384,800

N. B.—In both the above estimates the value of the Westminster Bridge Estate has been included at high and compulsory prices; but a considerable reduction from the estimates should be made, if the Board of Works can appropriate that estate at reasonable market value.

The above calculation, No. 2, includes the sum of 170,000 *l.* for clearing a site for additions to the Houses of Parliament, as set forth in the Report of 9th January 1855, from the Chief Commissioner of Her Majesty's Works to the Treasury.

(signed) *James Pennethorne.*

6 June 1856.

APPENDIX (E).

WESTMINSTER BRIDGE.

Dear Sirs, 7, Whitehall-yard, 9 June 1856.

IN reply to your note of the 7th (received this morning), I beg leave to say that the valuations of the Westminster Bridge Estate, over which the Commissioners of Works have control, and included in the estimates I sent you on the 6th instant, cannot, with the limited information I at present possess, be easily separated from the valuations of the lessees' interests, but they may be taken at about the two sums hereunder stated, such sums being intended to represent a compulsory price at about 20 per cent. above the market price.

	£.
Nos. 1 to 10, Bridge-street, Westminster (both included) - -	32,000
Nos. 7 to 13, and stable-yard, Bridge-street, Lambeth, and Nos. 91 to 102, inclusive, Bridge-road, Lambeth - - - - - -	38,000

I am, &c.

J. M. Rendel, Esq.
J. Simpson, Esq.

(signed) *James Pennethorne.*

APPENDIX (F.)

MR. PENNETHORNE'S Estimate of the Cost of forming the Approach of New Westminster Bridge, without the Purchase of the Property on the North side of the Bridge-road and Bridge-street.—Illustrating Plan No. 3.

SURREY SIDE.	£.	£.
South side of the Bridge-road and Bridge-street, Lambeth:		
Purchase of properties, including the interest of both freeholders and leaseholders - - - - - - - - - -	67,270	
Compensations to occupiers for good-wills, fixtures, removals, &c.	29,600	
Forming and paving street, and building vaults - - - -	3,500	
	100,370	
Add, for the general expenses of the Undertaking, and contingencies, but exclusive of the interest of monies borrowed or expended, about 15 per cent. - - - - - -	15,630	
Gross Outlay - - - - - -	- -	116,000

	£.	£.
Gross Outlay		116,000
Ground-rents upon lands to be let for building purposes, say 800 *l.* per annum, at 25 years' purchase	20,000	
Old materials	1,000	
Return		21,000
Net Outlay		95,000
Less, value of interest of Trustees of Westminster Bridge Estate		22,000
TOTAL £.		73,000

21 June 1856. (signed) *James Pennethorne.*

Estimated cost of the site on South side of Bridge-street, Westminster, for additions to the Houses of Parliament, as before £. 170,000.

APPENDIX (G.)

MR. PENNETHORNE'S Estimate of Cost of Approaches to Lambeth Bridge.

Vide Plan, No. 2.

No. 1.—COST of forming Approach on Surrey side.

	£.	£.
Purchase of properties coloured red on plan, including the interest of both freeholders and leaseholders	112,500	
Compensation to occupiers for goodwills, fixtures, removals, expenses, &c.	46,000	
Building vaults, forming and paving street, &c.	7,500	
	166,000	
Add for the general expenses of the undertaking and contingencies, but exclusive of interest on monies borrowed or expended, 15 per cent.	24,900	
Gross Outlay		190,900
Ground rents upon lands to be let for building purposes, say 1,320 *l.* per annum, at 25 years' purchase	33,000	
Old materials	2,600	
Return		35,600
NET OUTLAY £.		155,300

No. 2.—Cost of forming Approach on Middlesex side.

	£.	£.
Purchase of properties, coloured red on plan, including the interest of both freeholders and leaseholders	153,000	
Compensation to occupiers for goodwills, fixtures, removals, expenses, &c. (excepting Thorne's Brewery)	83,000	
Building vaults, forming and paving street, &c.	10,000	
	246,000	
Add for the general expenses of the undertaking and contingencies, but exclusive of interest on monies borrowed or expended, 15 per cent.	36,900	
Gross Outlay		282,900
Ground rents upon lands to be let for building purposes, say 2,900 *l.* per annum, at 25 years, purchase	72,500	
Old materials	5,000	
Return		77,500
Net Outlay £.		205,400

Summary.

	£.
Net Outlay: Approach on Surrey side	155,300
Ditto - Approach on Middlesex side	205,400
Total £.	360,700

6 June 1856. (signed) *James Pennethorne.*

APPENDIX (H.)

Mr. Pennethorne's Estimate of Cost of Approaches to Lambeth Bridge.

Vide Plan, No. 4.

No. 1.—Cost of forming Approach on Surrey side.

	£.	£.
Purchase of properties, including the interest of both freeholders and leaseholders	55,818	
Compensation to occupiers for goodwills, fixtures, removals, &c.	11,490	
Forming and paving street, and building vaults	6,619	
	73,927	
Add for the general expenses of the undertaking, but exclusive of the interest of monies borrowed or expended, about 15 per cent.	11,073	
Gross Outlay		85,000
Ground rents upon lands to be let for building purposes, say 405 *l.* per annum, at 25 years' purchase	10,125	
Old materials	375	
Return		10,500
Net Outlay £.		74,500

No. 2.—Cost of forming Approach on Middlesex side.

	£.	£.
Purchase of properties, including the interest of both freeholders and leaseholders	46,530	
Compensation to occupiers for good-wills, fixtures, removals, &c.	30,920	
Forming and paving street and building vaults	5,692	
	83,142	
Add for the general expenses of the undertaking, but exclusive of the interest on monies borrowed or expended, about 15 per cent.	12,858	
Gross Outlay		96,000
Ground-rents upon lands to be let for building purposes, say 213*l.* per annum, at 25 years' purchase	5,325	
Old materials	675	
Return		6,000
Net Outlay £.		90,000

Summary.

	£.
Net Outlay: Approach on Surrey side	74,500
Ditto - Approach on Middlesex side	90,000
£.	164,500

21 June 1856. (signed) *James Pennethorne.*

PLANS

NEW WESTMINSTER BRIDGE.

COPY of a REPORT presented to the First Commissioner of Public Works by Messrs. *Rendel* and *Simpson*, Civil Engineers, on the NEW WESTMINSTER BRIDGE.

(Sir Benjamin Hall.)

Ordered, by The House of Commons, *to be Printed,*
30 *June* 1856.

[*Price* 2*s.* 6*d.*]

318.

Under 8 *oz.*

225

PLANS

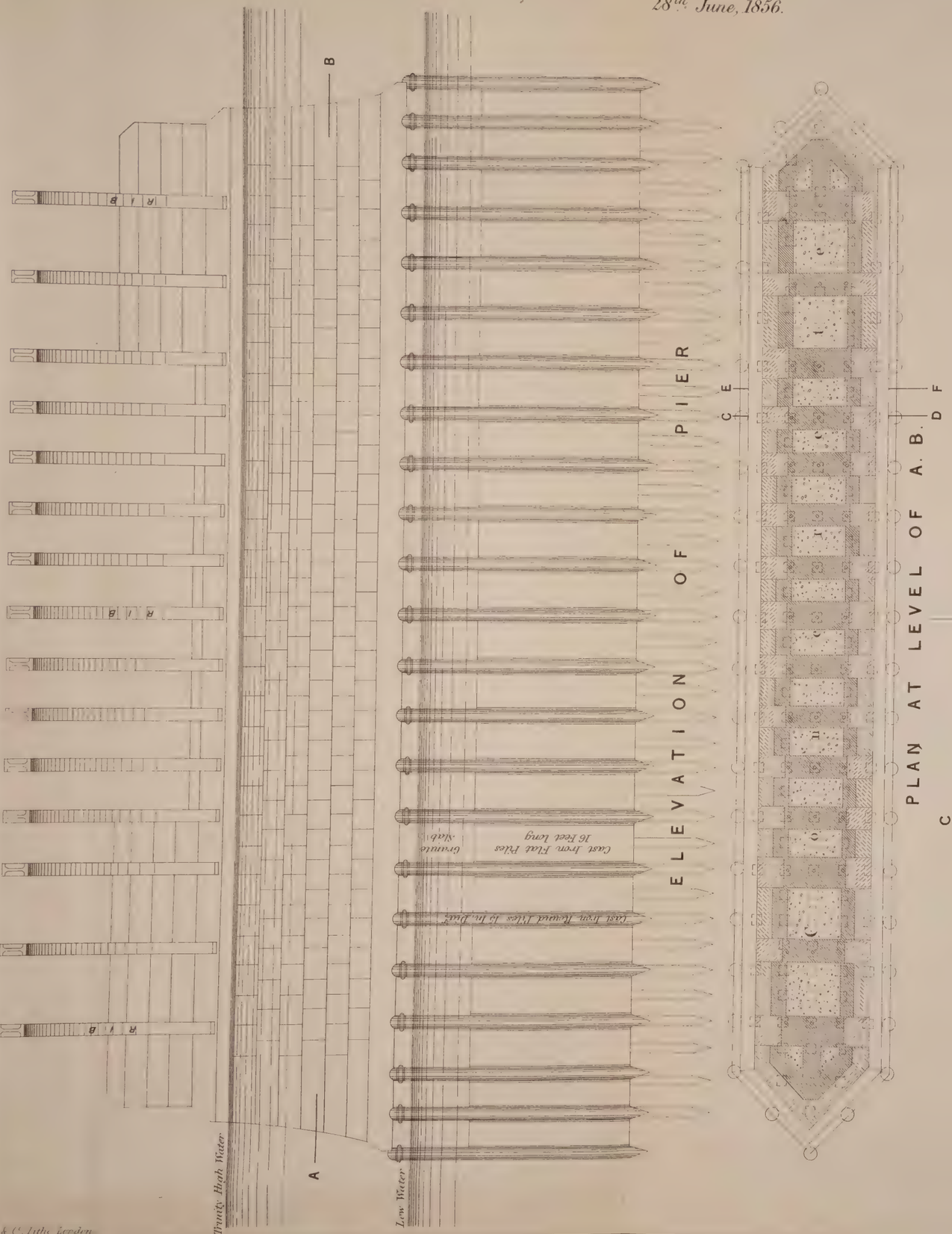
Referred to in the "Report presented to the First Commissioner of Public Works by Messrs. *Rendel* and *Simpson*, Civil Engineers, on the New Westminster Bridge."—Ordered to be Printed, 30 June 1856.

Nº 1

WESTMINSTER BRIDGE.

PLAN, ELEVATION & SECTIONS OF ONE PIER.

28th June, 1856.

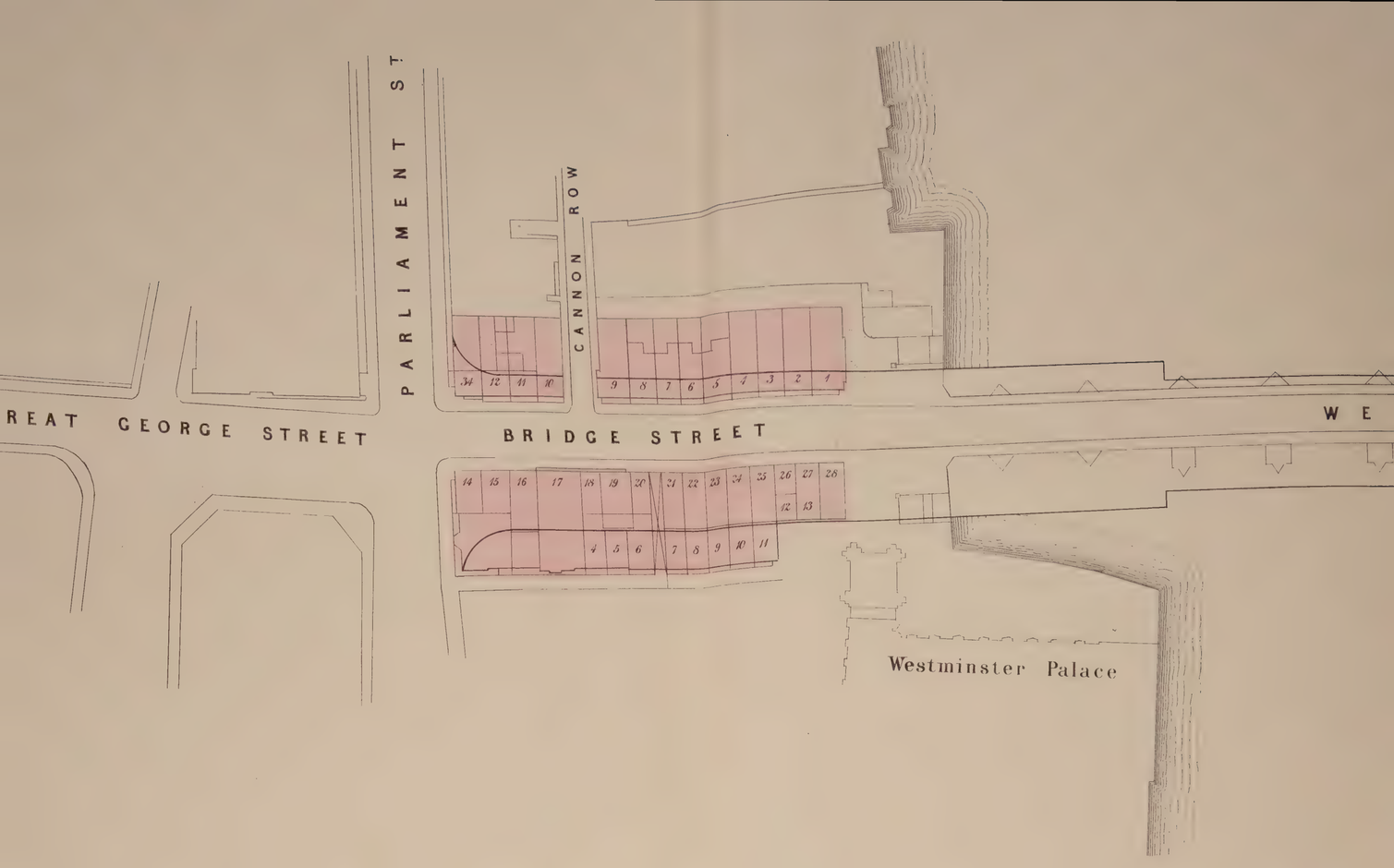


Jas. M. Rendel.
James Simpson.

Sturridge & Co. Tithe Lowden.

Nº 318. Ordered, by The House of Commons, to be Printed, 30th June, 1856.

Henry Hansard Printer.



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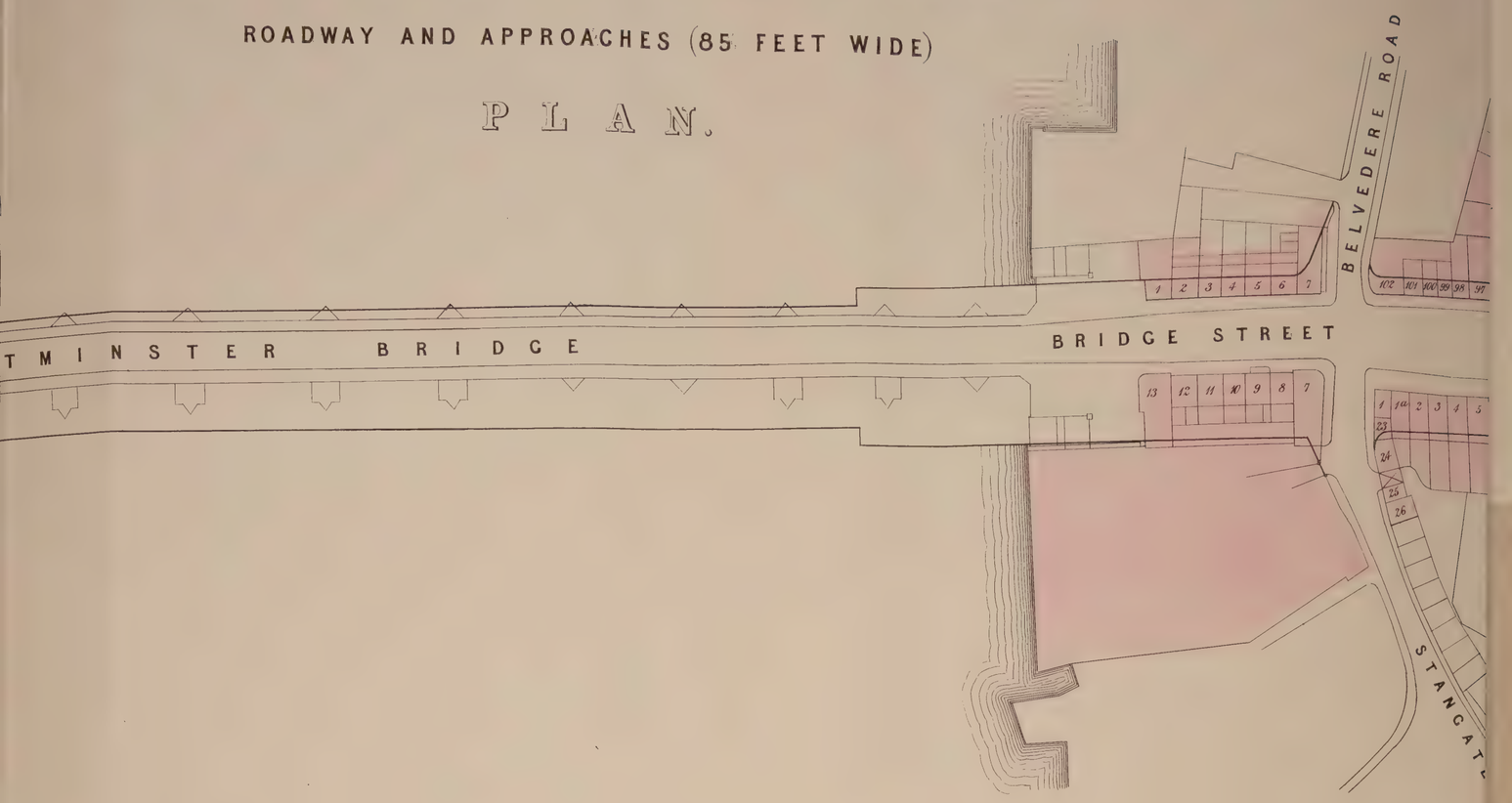
WESTMINSTER BRIDGE,

ROADWAY AND APPROACHES (85 FEET WIDE)

PLAN.

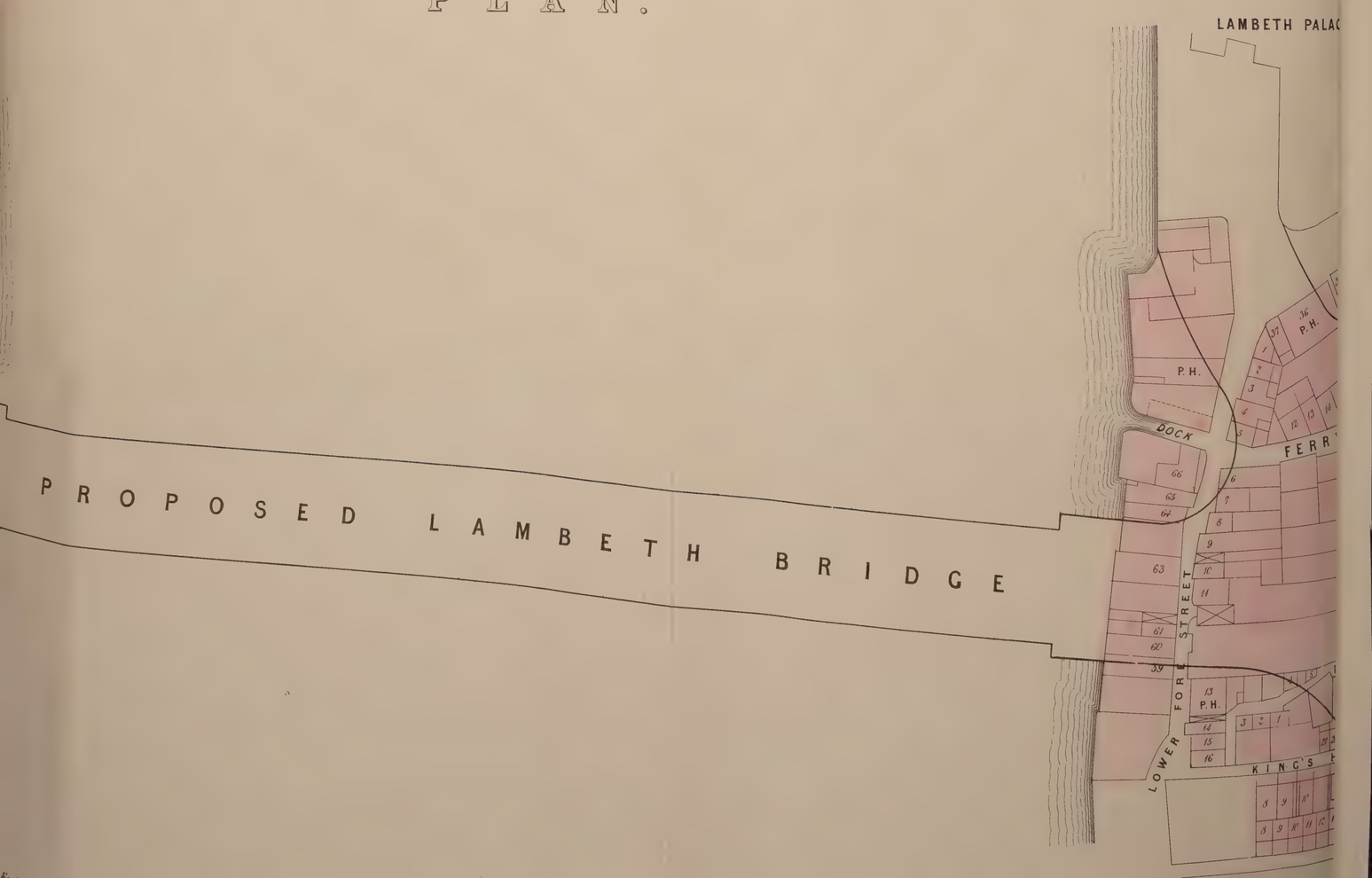


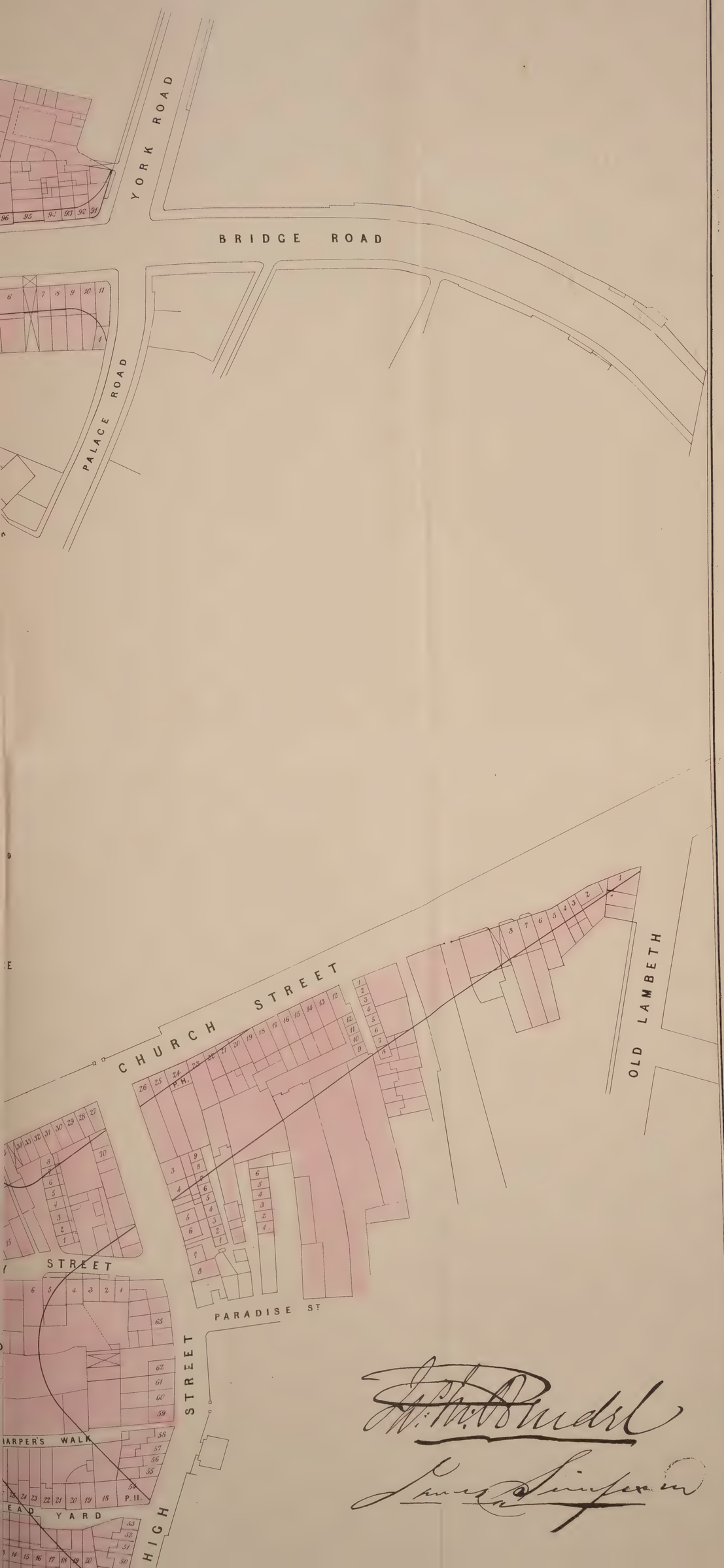
The Approaches in the case of each Bridge as referred to in Mr. Pennethornes estimate Appendix D & C.

LAMBETH AND HORSEFERRY ROAD BRIDGE

ROADWAY AND APPROACHES (85 FEET WIDE)

PLAN.




YORK ROAD
BRIDGE ROAD
PALACE ROAD
CHURCH STREET
OLD LAMBETH
STREET
PARADISE ST
HIGH STREET
HARPER'S WALK
YARD
P.H.
P.H.
P.H.

28th June 1856.

WESTMINSTER BRIDGE

ROADWAY AND APPROACHES (60 FEET WIDE.)

See Mr. Pennethorne's Valuation in Appendix F.

PLAN

Nº 3.

Nº 318 Ordered by The House of Commons to be Printed, 30th June 1856.

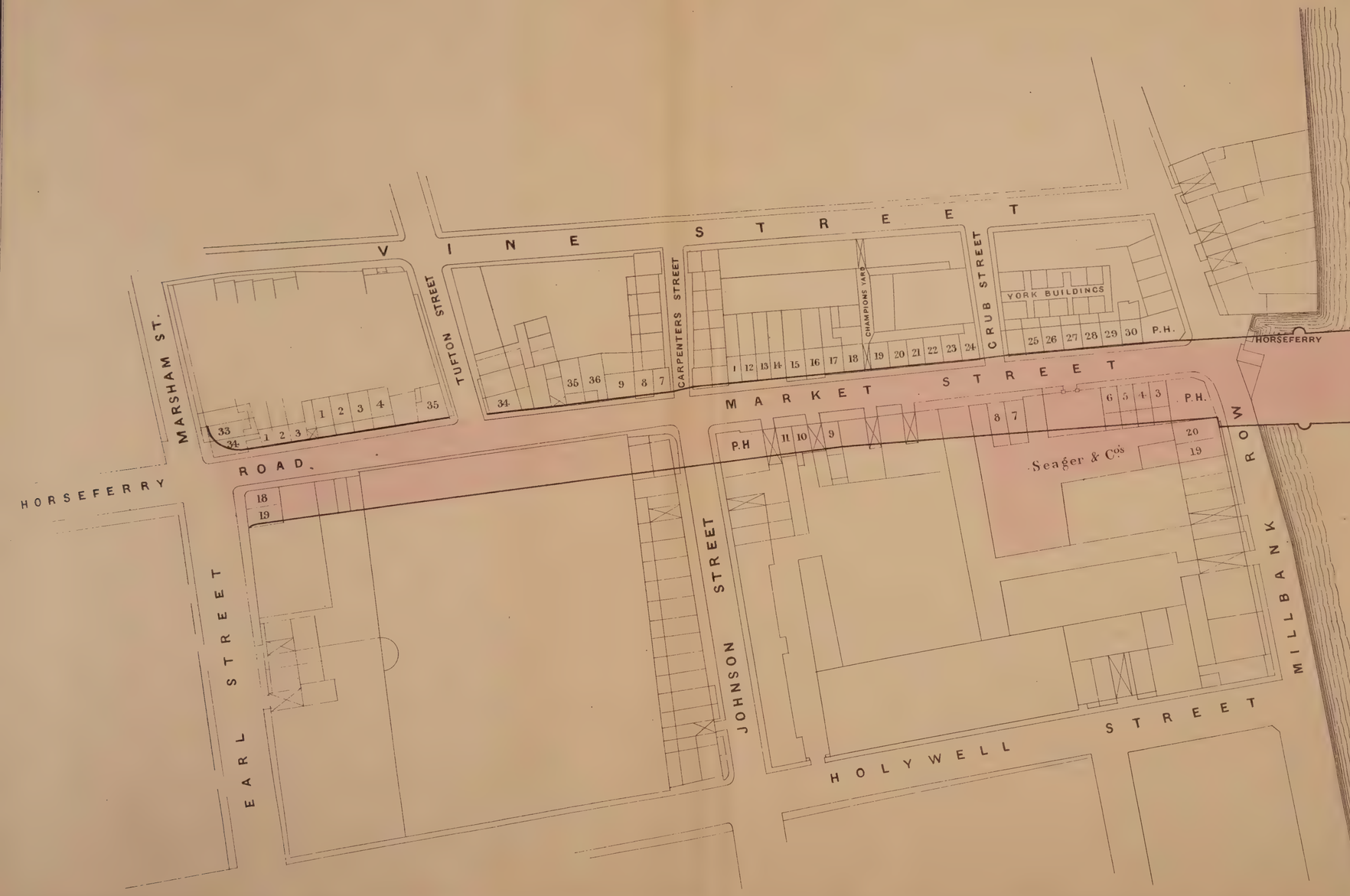
28th. June. 1856.

PROPOSED LAMBETH

ROADWAY AND APPROACHES (60 FT

See Mr. Pennethorne's Valuation in Appen

PLAN.



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No. 4.

I BRIDGE.

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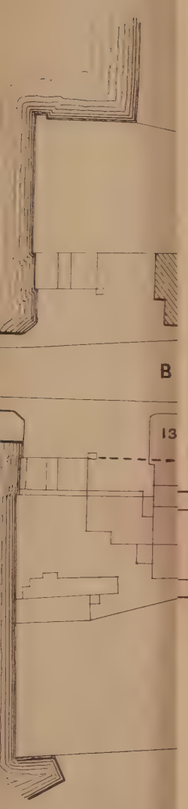


W. Th. Brudel

Laurs Simpson

PROPOSED LAMBETH BRIDGE AND APPROACHES.

28TH JUNE. 1856.

SECTION.

SECTION FROM THE ENGINE HOUSE, HORSEFERRY ROAD, WESTMINSTER TO THE RAILWAY ARCH, CHURCH ST., LAMBETH.

SCALES

HORIZONTAL ... FEET

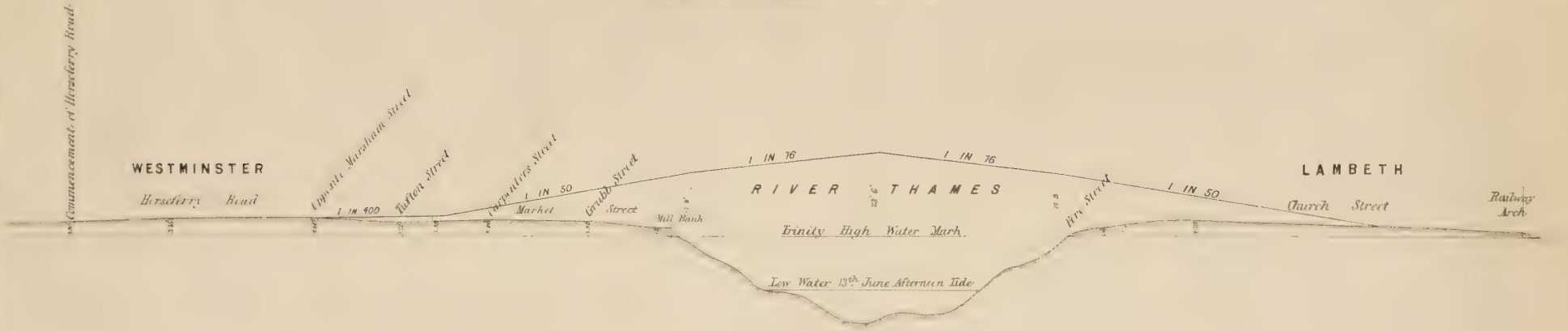
VERTICAL ... FEET

Henry Hansard Printer

PROPOSED LAMBETH BRIDGE AND APPROACHES.

28th JUNE. 1856.

SECTION.



SECTION FROM THE ENGINE HOUSE, HORSEFERRY ROAD, WESTMINSTER TO THE RAILWAY ARCH, CHURCH ST., LAMBETH.

SCALES

HORIZONTAL 100 FEET

VERTICAL 10 FEET

W. Thos. Bunch

James Simpson

No. 318. Ordered, by The House of Commons, to be Printed, 30th June, 1856.

Henry Hansard, Printer

PUBLIC HEALTH ACT.

RETURN to an Address of the Honourable The House of Commons, dated 22 July 1856;—*for*,

"RETURNS of the Number of TOWNS to which the PUBLIC HEALTH ACT, 1848, was applied between the 18th day of April and the 30th day of June 1856:"

"Of the Number of APPLICATIONS for the Sanction of the General Board of Health to the MORTGAGE of RATES for Permanent Works, and the Amount of LOANS sanctioned between the 1st day of January 1854, and the 30th day of June 1856:"

"And, of the Number of REPORTS by Superintending Inspectors made to the General Board of Health between the 1st day of January 1854, and the 30th day of June 1856, on the Examination of Plans and Works of Drainage or Water Supply, and on Inquiries under the Public Health Act (in continuation of Parliamentary Paper, No. 231, of Session 1856)."

NUMBER of TOWNS to which the PUBLIC HEALTH ACT, 1848, was applied between the 18th day of April and the 30th day of June 1856.

SEVEN:—viz.

Smethwick.	Sowerby-Bridge (Warley).
West Ham.	Rusholme.
Moss-side.	Bishop-Auckland.
Waterloo-with Seaforth (Great Crosby and Litherland).	

Note.—In the two last-mentioned Towns, the Act is now applied within a Boundary differing from, and more extensive than, that to which it was originally applied.

NUMBER of APPLICATIONS for the Sanction of the General Board of Health to the MORTGAGE of RATES for Permanent Works, and the Amount of LOANS sanctioned between the 1st day of January 1854 and the 30th day of June 1856.

Number of Applications for sanctions; viz.:

In 1854	77
1855	54
1856 (to June 30)	49
TOTAL	180

Amount of Loans sanctioned during the same period; viz.:

	£.	s.	d.
In 1854	635,196	10	6
1855	428,626	5	9
1856 (to June 30)	310,948	10	5
TOTAL	£. 1,374,771	6	8

RETURN of the Number of REPORTS by Superintending Inspectors made to the General Board of Health between the 1st day of January 1854 and the 30th day of June 1856, on the examination of Plans and Works of Drainage or Water Supply, and on Inquiries under the Public Health Act.

Number of Inspectors' Reports on the examination of Plans, &c.; and on Inquiries, under the Public Health Act -	376

General Board of Health, Whitehall,
24 July 1856.

PUBLIC HEALTH ACT.

RETURNS of the Number of Towns to which the PUBLIC HEALTH ACT, 1848, was applied, between 18 April and 30 June 1856; of the Number of Applications for the Sanction of the General Board of Health to the Mortgage of Rates for Permanent Works, and Amount of Loans sanctioned between 1 January 1854 and 30 June 1856; and Number of Reports by Superintending Inspectors to General Board of Health, between 1 January 1854 and 30 June 1856, on Examination of Plans and Works of Drainage or Water Supply (in continuation of Parliamentary Paper, No. 231, of Sess. 1856).

(*Mr. Cowper.*)

Ordered, by The House of Commons, *to be Printed,*
26 *July* 1856.

PUBLIC HEALTH ACT.

RETURN to an Order of the Honourable The House of Commons, dated 21 April 1856;—*for*,

A RETURN "of the Number of Towns to which the PUBLIC HEALTH ACT (11 & 12 Vict. c. 63) was applied during the Years 1854 and 1855 respectively, and up to the 18th day of April 1856."

PLACES to which the PUBLIC HEALTH ACT has been applied in 1854 and 1855, and to the 18th April 1856.

1854:

(By Provisional Orders of the General Board of Health, confirmed by "The Public Health Supplemental Act 1854.")

Plymouth (Devonshire),	Bishop Auckland (Durham),
Haworth (W. R. Yorkshire),	Willenhall (Staffordshire),
Aberdare (Glamorganshire),	Over Darwen (Lancashire) - 6.

(By Orders in Council, on the recommendation of the General Board of Health.)

Crumpsall (Lancashire),	Houghton-le-Spring (Durham),
Arnold (Nottinghamshire),	Barton-upon-Irwell (Lancashire),
Heanor (Derbyshire),	Burley (Yorkshire),
Wanstead (Essex),	Malton (Yorkshire) - - - - 9.
Garston (Lancashire),	

1855:

(By Provisional Orders of the General Board of Health, confirmed by "The Public Health Supplemental Act 1855.")

Middlesbrough (N. R. Yorkshire),	Tunstall (Staffordshire),
Windhill (Idle, W. R. Yorkshire),	Toxteth Park (Lancashire),
Christchurch (Monmouthshire),	Romford (Essex)—(Alteration
Keighley (W. R. Yorkshire),	of Boundary) - - - 7.

(By Orders in Council, on the recommendation of the General Board of Health.)

Wilton (Wiltshire),	Mistley (Essex),
Eccleshill (Bradford, Yorkshire),	Redcar (Yorkshire),
Tipton (Staffordshire),	Wellingborough (Northamptonshire) - 6.

SUMMARY.

	1854.	1855.
By Provisional Orders of General Board of Health - - -	6	7
By Orders in Council - -	9	6
	15	13
TOTAL - - -	28	

1856:

The Public Health Act has been applied by Order in Council, on the recommendation of the General Board of Health, to the following place:

Smethwick (Staffordshire).

Note.—In addition to the above-named places, to which the Public Health Act has been applied during 1854 and 1855, portions of that Act have been incorporated in Local Acts for the following places:—

1854:

Bolton (Lancashire).
Burnley (Lancashire).
Kingston-upon-Hull.
Ryde (Isle of Wight).
Wellington (Salop).

1855:

Shrewsbury (Salop).

General Board of Health, Whitehall,
9 May 1856.

T. Taylor, Secretary.

PUBLIC HEALTH ACT.

RETURN of the Number of Towns to which the Public Health Act (11 & 12 Vict. c. 63) was applied during the Years 1854 and 1855 respectively, and up to the 18th day of April 1856.

(*Mr. Thomas Duncombe.*)

Ordered, by The House of Commons, *to be Printed,*
21 *May* 1856.

Under 1 *oz.*

CEMETERIES (METROPOLIS).

RETURN to an Address of the Honourable The House of Commons, dated 3 April 1856;—*for*,

"COPIES of Reports made to the Secretary of State for the Home Department, by Dr. *Sutherland* and by Mr. *Holland*, on the State of certain Metropolitan Cemeteries, and bearing date respectively the 23d day of January 1855, the 26th day of November 1855, the 28th day of January 1856, and the 3d day of March 1856."

Whitehall, 7 April 1856. W. MASSEY.

Metropolis Burials.

Report on a Letter from the Chairman of the London Necropolis Company.

My Lord, Whitehall, 23 January 1855.

In compliance with your Lordship's instruction of the 17th instant, enclosing a letter from the Chairman of the London Necropolis and National Mausoleum Company, and directing me to make inquiry into the correctness of his statements respecting the manner of conducting interments in certain burial grounds, I beg respectfully to state that I have inspected the grounds, and that the following is the result.

There are four burial grounds named in the letter; they are—

1. *Kelday's Ground.*—This place of interment is better known as the Cambridge Heath and North East London Cemetery, and is situated in Bethnal-green, not far from Victoria Park. It is under order for closing on 1st October 1855, and till then interments are confined to one body in a grave, except in family vaults and graves.

I made inquiry, separately, of three individuals connected with the ground, as to whether the requirements of the Order in Council were complied with, and they all made the same statement; namely, that the Order was observed, except where two children of the same family, or a mother and child, were brought for burial together.

There were 15 graves open when I was in the ground. They were all such graves as would hold one body each; but I have little doubt that more than one are buried in such graves as occasion may offer. The practice of burial is, apparently, not so objectionable as it is in the other grounds complained against, and it will soon be closed.

2. *St. James-the-Less, Bethnal-green*, is situated at no great distance from the preceding. An Order in Council issued on 6th December 1853, for burying only one body in a grave in this ground. At that time, the whole area, about an acre in extent, was untouched, except a small corner in which were a few graves. The neighbourhood was open and there were no houses very close to the ground.

I was surprised, on visiting the ground on Saturday last, to find that about one-half of it was already covered with graves. Since the closing of the other Metropolitan graveyards there has been an active burial business going on in this churchyard, conducted on the same principles as if the Act of Parliament had never existed. There were 32 open graves when I was in the ground. They were dug purposely to hold four or five adults each, and the children's graves to hold about seven each, and it was admitted frankly by the incumbent that such was the practice of burial. A contract has, moreover, been entered into with the guardians of West Ham Union to bury their paupers, and hence the dead of a rural district are brought into the metropolis for burial.

Moreover, no inquiry appears to be made as to where the dead come from, and there is every reason to suppose that the dead of parishes within the metropolis, whose grounds are closed, have been buried in this churchyard, contrary to the provisions of the Metropolis Burials Act.

On pointing out to the incumbent the disregard of the Order in Council, and of the Act, he stated that he had heard of a deputation waiting upon your Lordship on some subject, and that the Government had consented to allow the rule of burying one body in a grave to drop tacitly.

The case as regards this ground is understated in the chairman's letter. It would be contrary to public health and public decency, as well as to the intentions of the Act, to permit the present practices to be continued.

3. *Victoria Park Cemetery.*—This cemetery is unconsecrated, and exempted from the operation of the Metropolis Burials Act. It is situated in Bethnal-green, near St. James's Church. The company to which it belongs, contracts with parishes, and they carry on their trade with the usual neglect of health and decency.

I saw a grave open, at the bottom of which lay a pauper coffin without any earth on it. A board or two was placed over the grave until the next coffin should be deposited, and so on until the grave becomes full. A number of other common graves were ready for the reception of coffins, and each grave, it was admitted, would hold four or five adult coffins. I saw a grave for children, which was six feet long, two feet eight inches wide, and ten feet six inches deep, in which it was admitted that 20 or more coffins, according to size, would be deposited. There was a coffin in this grave without a particle of earth over it.

Children's coffins, it was admitted, were occasionally brought in cabs for burial.

I am of opinion that the statements made in the chairman's letter about this cemetery are substantially correct.

4. *Abney Park Cemetery, Stoke Newington.*—This is also an unconsecrated cemetery, and exempted from the operation of the Metropolis Burials Act. The allegation in regard to this ground is correct as to the manner of burial. The surface is tolerably well kept, but underneath it is a mass of corruption in the used part.

I saw a grave open with two men working at it; I was told it was a common grave, and 17 feet deep. There was water running in upon the bottom of the grave, and one man baled this water into a bucket, which the other drew up and threw over the surface of the ground. This grave, it was stated, would hold seven adult coffins. In the private graves, interments take place in the same manner, and, being private property, they can be used for any interment with permission of the proprietor.

In regard to the practice stated in the letter to be followed in the other metropolitan cemeteries, it is the same as the mode of burial practised in Abney Park Cemetery. At the present time, indeed, the only cemetery company which combines in its practice a proper regard for public health and public decency is the London Necropolis Company. The manner of conducting interments in their cemetery at Woking is as commendable as the practice of the other companies is the contrary.

I have, &c.
(signed) *John Sutherland.*

The Right Hon. Viscount Palmerston,
Secretary of State for the Home Department.

Sir, 4, Old Palace Yard, 26 November 1855.

Happening to hear that very objectionable practices attending burials were permitted at the Victoria Park Cemetery, especially on Sunday afternoons, I took the opportunity, while visiting friends in the neighbourhood, of attending at the cemetery yesterday about 4 p. m., and witnessed scenes there of a very painful nature.

I was informed that about 100 bodies were buried that day, and that frequently a still larger number are buried on one day, but as I did not consider my visit an official one, I did not ask for the exact numbers. I staid on the ground about an hour, and during that short time saw from 30 to 40 coffins put into graves; I cannot say buried, for nearly all of them were left uncovered while I stayed. The greater part of these were buried in 12 graves; I did not notice any put into any other than one of the 12, but there was such a bustle that burials I did not notice may have happened. All these graves were very near each other; and as a coffin was brought for burial about every two minutes, or rather less (and on several occasions as many as six almost simultaneously), the bustle about the graves was continuous and distressing. How many coffins were placed in a grave I could not tell; I saw eight in one, all entirely uncovered, and it was evidently intended to put more in it. In all the other open graves I saw several coffins, in some a great many, placed side by side, and one above the other, in immediate contiguity, not even a spadeful of earth between them. I saw in one grave seven coffins (and it seemed prepared for more); this grave had been dug so close to the next that the soil had fallen, exposing to view three of the many coffins with which it was filled. This extreme overcrowding of the ground seems as yet to be chiefly confined to one corner of the cemetery, a space which I estimate at about a rood in extent, the level of which is raised by interments from three to five feet in height. To all appearance, there is in this quarter of the cemetery one mass of putrefying corruption, consisting of several thousand corpses, contained in coffins immediately touching each other in the same graves, and separated from those in the adjoining graves by a few inches only of soil, which are heaped up upon each other, partly below, partly above the natural level of the ground, and covered by only a few feet of open gravel, forming altogether a flat mound about 40 yards long by 30 broad, and from three to five feet high.

I did not perceive any unpleasant smell, but the day was cold and the wind fresh; on a calm, warm day, I should expect to find a very oppressive odour, for the quantity of putrid gas given off by such a mass of corruption must be far greater than the soil can absorb or decompose. Standing and moving around and among these graves were some 200 mourners and spectators, embarrassing by their numbers and want of order the conduct of the funerals. I presume the number of persons I saw is not unusual, and it must sometimes (I think frequently) happen that large numbers of persons are exposed to the foul emanations arising from the putrefaction beneath their feet, and I regard with great apprehension the consequences which may be reasonably anticipated if the practice be continued until the hot weather, not to the neighbourhood only, but also to the numerous attendants and mourners. I did not notice any behaviour on the part of either the attendants or spectators that could be fairly blamed, but there was a hastiness about the attendants, arising from their mall numbers and the rapidity with which the coffins arrived for burial, and a constant bustle among the crowd, that must have been very distressing to those who came to pay the last honours to their deceased friends. For instance, I noticed a funeral party following to the grave the coffin of a young child, who experienced some little difficulty in making their way through the crowd, and after the coffin had been lowered into the grave, and while the bereaved mother was leaning over to take a last look of that which contained what was so dear to her, one of the men (without waiting even a minute until the poor woman had left) lowered upon her child's another coffin and hid it from her sight. In another case I noticed a funeral party, who had just got into their mourning coach, after seeing the coffin containing what I supposed to be the body of their father, and before the coach moved off, they saw another coffin brought and lowered upon that of their parent. I saw evident expression of distress at the occurrence.

There is a difficulty in proposing a remedy for these evils, inasmuch as the cemetery is, by the 7th section of the Metropolitan Burials Act, exempt from any

Order in Council prohibiting interment in it. I think it very probable, however, that the directors are not aware of the full extent of what is being done, and that if they were informed that Sir George Grey's attention has been called to their management, some mitigation of the evil would be likely to be the result. I beg to submit, that before taking any more decided step, it would be expedient that the cemetery should be again visited to ascertain that there was nothing exceptional in what I noticed yesterday.

I have, &c.

W. Massey, Esq., M. P. (signed) *P. H. Holland.*
Home Office.

BURIAL ACTS.

FURTHER REPORT on the Burials at the Victoria Park Cemetery.

Sir, 4, Old Palace Yard, 28 January 1856.

I BEG to acknowledge your letter of November 29, referring to mine of the 26th, describing the practices then prevailing at the Victoria Park Cemetery, and requesting me to visit the cemetery again, and report to Sir George Grey the result.

I have to report that I visited the cemetery on Sunday afternoon, the 23d of December, and found that funerals were being conducted much in the same manner as on my former visit. I met on that occasion the secretary, who informed me that C. E. Butler, Esq., M.P. for the Tower Hamlets, was the chief proprietor, and wished to see me. I consequently called on Mr. Butler, and found that he was very imperfectly acquainted with what was done at the cemetery. He did not know that pit-burial was practised there, and seemed very anxious that no improper practices should be permitted at the cemetery, which is, he informed me, situated amidst his own property, and his own tenants would be the first to suffer from any injury arising from it. Moreover, he would not, knowingly, be a party to anything calculated to endanger the public health.

Mr. Butler urged, very reasonably, the difficulty of effecting any sudden change, which would render necessary a considerable increase in the cost of burial before the public cemeteries now being formed are ready for use; and requested time for consultation with the managers of the cemetery, as to what regulations could be adopted calculated to check the evil without very seriously inconveniencing the poor, who chiefly bury at this cemetery.

He further urged, that any regulations or restrictions it might be thought necessary to place upon burial at Victoria Park Cemetery ought, in fairness, to be imposed upon the other cemeteries of the metropolis also, at which he believed the same mode of burial is the common practice; and I think he is correct in this opinion, but have no direct evidence of the fact.

Mr. Butler has since written to me, to say that instructions have been given that half a yard of earth shall be placed between each coffin, and that no coffin be placed within four feet of the surface. He expects that the number of burials will be considerably diminished, and states that they are already reduced materially, by the terms being raised, by the opening of the City of London Cemetery, and by the expected opening of one for the parish of Shoreditch.

It will be observed that the most glaring of the objectionable practices I witnessed (that of piling coffin upon coffin, in rapid succession and close contiguity) will be completely remedied if the regulations Mr. Butler announces are observed, and that the risk of injury to the public health will be very considerably reduced, perhaps entirely removed, if, in addition, Mr. Butler's intention of having the surface covered with a growing turf be carried into effect.

I submit whether, considering that this cemetery is exempt by the 7th section from being closed by Order in Council, and that it will, in all probability, be superseded in a few years by the parochial and other cemeteries now being formed, it would be expedient to attempt to impose any more stringent regulations, especially as its chief proprietor seems sincerely anxious to guard against mischief, as soon as he is aware of its existence. I think, however, it will be expedient that the proceedings at the cemetery should be observed from time to time, lest the regulations made by the proprietors should be disregarded; and

perhaps

perhaps it would be well to ascertain whether Mr. Butler is correct in his opinion that a mode of burial similar to that I witnessed at the Victoria Cemetery is customary at the other metropolitan cemeteries.

I have, &c.

W. Massey, Esq., M.P. (signed) *P. H. Holland.*
&c. &c. &c.

Sir, 4, Old Palace Yard, 3 March 1856.

I BEG to acknowledge your letter of the 1st ultimo, instructing me to take an early opportunity of visiting the Victoria Park Cemetery, to see whether the improvements in its management promised were duly carried into effect, and to inquire into the correctness of the allegation that objectionable practices were adopted at the other metropolitan cemeteries also.

I have to report that I have inspected all the cemeteries except two, but am only prepared to report as regards the Tower Hamlets Cemetery; the result in the other cases being yet undecided.

I found at the Tower Hamlets Cemetery that "pit-burial" was the practice; that many coffins were placed in one grave; several side by side, and layer upon layer, without any intervening earth, or at most only just enough to cover them. While I stayed, I saw five coffins put into one grave, and it was left open for the reception of more.

Upon inquiry, I found that the objectionable nature of this practice had been pointed out to the directors by their secretary, who has been newly appointed, and they had already resolved to stop pit-burial; and, at an interview I had with them, they resolved, in future, that the following regulations should be observed:

1. The directors have determined that in common interments there shall be one coffin buried at once in each grave, the others placed above, separated by layers of soil, not less than a foot thick; the highest coffin will be four feet below the surface, and that will be covered with growing vegetation; and such graves will not be re-opened within a period of 30 years at the least, and not then unless decomposition is found to be completed.

2. In vaults and brick graves, lead coffins are used in accordance with the Act of Incorporation.

3. With respect to other family graves, the directors urge that such are not their property; they would not object to having a layer of earth interposed between each coffin, but do not feel authorised to order that alteration themselves.

Though I do not consider the above regulations as perfectly satisfactory, their observance will guard against the worst of the evils which have been complained of, and they are certainly a very great improvement on the former practices.

The area of the cemetery is amply large enough for the probable number of its interments. I hope to be able to convince the directors of the expediency of not having all the common graves together, and of leaving a considerable interval between each, and if that be done, and a layer of earth interposed between the coffins in private as well as common graves, the ground for apprehension will be much lessened.

I have, &c.

W. Massey, Esq., M.P. (signed) *P. H. Holland.*
&c. &c. &c.

CEMETERIES (METROPOLIS).

COPIES of Reports made to the Secretary of State for the Home Department, by Dr. *Sutherland* and by Mr. *Holland*, on the state of certain Metropolitan Cemeteries, and bearing date respectively 23 January 1855, 26 November 1855, 28 January 1856, and 3 March 1856.

(*Mr. Wilkinson.*)

Ordered, by The House of Commons, *to be Printed,*
10 *April* 1856.

257

GENERAL BOARD OF HEALTH.

REPORTS

TO THE

RIGHT HON. WILLIAM COWPER, M.P.,

PRESIDENT OF THE GENERAL BOARD OF HEALTH,

ON THE

METROPOLIS WATER SUPPLY,

UNDER THE PROVISIONS
OF THE METROPOLIS WATER ACT.

Presented to both Houses of Parliament by Command of Her Majesty.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY
FOR HER MAJESTY'S STATIONERY OFFICE.

1856.

[2137]

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PART I.

CHEMICAL.

Report on the Chemical Quality of the Supply of Water to the Metropolis; by A. W. Hofmann, Professor of Chemistry in the Metropolitan School of Science, and Chemist to the Museum of Practical Geology, F.R.S.; Ph. D.; LL.D. &c., and Lindsey Blyth, Esq., Lecturer on Natural Philosophy at St. Mary's Hospital.

Letter from the Right Hon. William Cowper, M.P., President of the General Board of Health.

General Board of Health,
Whitehall, Jan. 3, 1856.

Gentlemen,

I have to request that you will examine and report upon the water now supplied to the metropolis by Water Companies, in pursuance of the Metropolis Water Act, 1852.

The object I have in view being to judge of the salubrity of the water delivered for the consumption of the inhabitants of London, I would suggest that your analyses should be directed to ascertain the degree of hardness, permanent and temporary, of the water, and the total admixture of matters foreign to its chemical composition, distinguishing the suspended from the dissolved, the mineral from the organic, and among the latter to specify, as far as may be practicable, those which are putrefiable.

I have, &c.

Professor Hofmann,
Lindsey Blyth, Esq.

William Cowper.

Report by Professor Hofmann and Mr. Blyth.

Sir,—We have now the honour to report to you the results obtained in the analysis of the water-supply to the metropolis, which we have undertaken at your request.

The object of the inquiry being to obtain a view of the value of the waters in a sanitary respect and for domestic purposes, it was thought advisable to exclude from the investigation all details which did not directly affect this question.

In accordance with your instructions we have therefore confined ourselves in the analyses to:—

I. The determination of the hardness of the waters, *a.* before boiling (permanent and temporary hardness), and *b.* after boiling (permanent hardness).

II. The determination of the total amount of solid matter contained in the waters.

III. The determination of the organic matter contained in the waters.

It was, moreover, considered important to repeat these determinations from time to time, so as to obtain some insight into the variations of the waters during the several seasons.

Of the above three determinations, the examination of the organic matter which is present in waters is of an especial interest in a sanitary point of view. This examination is attended with very considerable difficulties. The accurate determination of the quantity of organic matter in a water is one of the most delicate operations in analytical chemistry. Still greater is the difficulty of examining into the nature of the organic matter; the total amount of organic matter is so small that immense quantities of water must be evaporated in order to obtain the material upon which to work, and few indeed are the data upon which a satisfactory examination of this kind can be founded at the present moment.

Very little is known of the nature of the ill-defined substances which constitute the organic matter generally found in water. Berzelius distinguishes two substances, crenic and apocrenic acids, which slightly differ in their chemical deportment; but these two bodies are as yet scarcely chemically examined, and much doubt still hangs over their individuality and even over their existence. The organic matter in water has been divided into *nitrogenous* and *non-*

nitrogenous matter; but all we know is, that certain varieties of the organic matter found in water contain nitrogen, which is readily shown by treating them with hydrate of potash, when abundance of ammonia is evolved.

The opinions of chemists are divided as to the manner in which organic matter in water is capable, under certain conditions, of producing a deleterious effect upon the animal economy. But it is now generally admitted, that the substances which constitute the organic matter of water act injuriously by no means in consequence of being poisonous themselves, but by undergoing those great processes of transformation, called decay and putrefaction, to which all vegetable and animal matter is subject, when no longer under the control of vitality, either in plants or animals. These putrefactive processes either give rise to the formation of poisonous bodies, or they act simply as ferments, generating similar processes of decomposition in the substances composing the animal organism. Now, with special reference to the last mode of action, it is well established by general experience that *nitrogenous* substances are infinitely more liable to undergo putrefaction than organic bodies from which nitrogen is absent. And hence the very general and correct opinion that the deleterious character of organic matter in water is proportionate to the amount of *nitrogen* which it contains. Could this nitrogen be estimated with any degree of accuracy, such an estimate would certainly afford the most satisfactory element in the examination of the organic matter. Unfortunately this estimate is attended with very considerable difficulties. The nitrogen of the organic matter which has undergone putrefaction and has therefore ceased to be deleterious, remains in the water, partly as ammonia, partly as nitric acid. It would therefore by no means be sufficient to evaporate the water and to determine the amount of nitrogen in the residue. It would be absolutely necessary to estimate also the nitrogen present in the form of nitric acid and of ammonia, and only after the deduction of their joint amount

from the total amount, numbers would be obtained, which, representing the quantity of still putrescible nitrogenous substances, would afford, within certain limits, the necessary data for a comparison of the organic matter present in different waters.

It is obvious that this mode of proceeding is very complicated, and not likely to furnish trustworthy results, unless carried out with the greatest circumspection, and with all the appliances which the modern progress of analytical chemistry can suggest. It was our intention to enter fully into this part of the inquiry, and a series of experiments were actually made by us with the view of fixing on the best method of conducting the inquiry. The illness of Mr. Blyth, which at this period deprived us of his assistance, has compelled us to abandon, for the present at least, this part of the examinations, and to confine ourselves to an accurate determination of the hardness (permanent and temporary), of the total amount of solid constituents, and of the organic matter.

Collection of the Waters.

Before entering on the chemical examination of the waters, it will be desirable to say a few words on the mode of collecting the different samples submitted to analysis.

The first series of samples were taken at your desire from the mains of each Company, as near as possible to the houses supplied, so as to insure a fair estimate of the actual quality of the water used by the inhabitants of the Metropolis.

In accordance with these instructions, Mr. Blyth collected samples from each of the nine Water Companies mentioned in the Metropolis Water Act, and also from the works of the Woolwich and Plumstead Water Company which have been established since that Act was passed.

The samples were collected in clean-stoppered glass bottles. In some instances they were taken from stand-pipes established in connection with cab stands; in others the water was specially turned on from the main by a turncock. Where it was not

practicable to procure a supply by either of these modes, the water was taken from a service pipe through which it had been flowing for some time, without having previously been stored in tanks or cisterns, so that the samples could be considered as actually representing the water of the main.

The exact source of each sample, and the date of taking it, are stated in the tables giving the result of the examination.

In the second series of samples, taken at a later period of the year, it was desired to obtain some information as to the effects of filtration. To this end, samples were taken of the waters before and after filtration at the works of each Company, and with the co-operation of their officers, as well as from the mains within the district supplied. As in the first instance, the source of the waters and the date of taking them are stated in the Tables.

It may be well to remark, that at the period of taking the first set of samples, a great deal of rain had fallen, the rivers were swollen and turbid, and the filtration did not seem to be quite perfect; in fact, some of the samples exhibited an amount of matter in suspension which required several days to subside.

At the period of taking the second set of samples, with one exception, very little rain had fallen for nearly two months, the rivers were comparatively clear, and all the samples of filtered water were perfectly bright.

In the exceptional case, that of the Lambeth Water Company, some delay having occurred before samples could be procured, heavy rains had fallen a day or two previously, and the Thames was partially swollen and turbid.

The Lambeth Company have no subsiding reservoirs, the water passing directly from the river at Kingston on to the filtering beds. In order to obtain a specimen of unfiltered water it was necessary to draw directly from the Thames, as it passes into the Company's Works. It was very evident to the eye that the water of the Thames was not of an uniform

character, and therefore samples were taken from both sides of the river The Table No. 5. will show to what extent the two samples differed.

To obtain a definite knowledge of the influence of the several seasons upon the Metropolitan Water Supply, a much more extended series of analyses would be required.

However, the two sets of samples examined during the present inquiry may be considered as fairly representing the condition of the water in a wet and in a dry period.

Chemical examination of the Water.

The following Tables exhibit the results obtained in the analysis of the ten waters submitted to examination. It may be stated that each number contained in the Table is, with one or two exceptions, the mean of two well concordant experiments, the details of which are united in the Appendix. The hardness was determined by the well-known elegant process of Professor Clark; the second determination (of the permanent hardness) being made after five minutes boiling. This deserves particularly to be mentioned, inasmuch as by protracted ebullition the hardness may be still further reduced. The total amount of solid constituents was determined by evaporating an exactly measured quantity of the water with a known amount of carbonate of soda in platinum capsules, and weighing the residue, dried at a temperature of 248° F., in the same capsules. This residue ignited, and subsequently, moistened repeatedly with solution of carbonate of ammonia (to replace the carbonic acid which lime and magnesia-salts might have lost during the ignition) and dried at a gentle heat until the weight had become constant, furnished the amount of saline, and, by calculation, the amount of organic matter.

For the sake of comparison we have added in each case the results obtained, in 1851, by the Government Commission (consisting of Professors Graham, Miller, and Hofmann).

I.—WATER supplied to the METROPOLIS by the GRAND JUNCTION WATER COMPANY.

Results obtained in 1856.

Description of Water.	Date of Taking.	Hardness.			Solid Constituents, Grains per Gallon.		
		Total.	Permanent.	Temporary.	Total Solid Residue.	Organic Matter.	Inorgan. Matter.
From main in Grand Junction Road; filtered.	Jan. 18	15·95	9·05	6·90	23·35	1·98	21·37
From stand pipe in Picadilly; filtered.	Mar. 29	14·10	6·50	7·60	21·21	1·015	20·195
From pipe at works coming from Hampton; unfiltered.	Mar. 29	14·55	8·2	6·35	23·22	1·17	22·05

Results obtained by the Government Commission in 1851.

Nearest accessible point to the works of the Company.	Between Jan. 29 and 31.	14·00	—	—	21·72	3·07	18·65

II. —WATER supplied to the METROPOLIS by the WEST MIDDLESEX WATER COMPANY.

Results obtained in 1856.

Description of Water.	Date of Taking.	Hardness.			Solid Constituents, Grains per Gallon.		
		Total.	Permanent.	Temporary.	Total Solid Residue.	Organic Matter.	Inorgan. Matter.
Service pipe near Dorset Square; filtered	Jan. 18	13·65	9·4	4·25	21·16	0·819	20·341
From cab-stand, Broadway, Hammersmith; filtered.	Mar. 31	14·4	7·4	7·0	19·897	1·015	18·882
From Hampton; unfiltered.	Mar. 31	14·8	7·55	7·25	22·05	1·05	21·00

Results obtained by the Government Commission in 1851.

Nearest accessible point to the works of the Company.	Between Jan. 29 and 31.	14·6	—	—	22·67	2·75	19·92

III.—Water supplied to the Metropolis by the Chelsea Water Company.*

Results obtained in 1856.

Description of Water.	Date of Taking.	Hardness.			Solid Constituents, Grains per Gallon.		
		Total.	Permanent.	Temporary.	Total Solid Residue.	Organic Matter.	Inorgan. Matter.
From stand pipe at cab-stand in King Street; filtered.	Jan. 22	11·8	9·05	2·75	20·31	lost.	lost.
From stand pipe at cab-stand, King Street; filtered.	April 2	14·8	8·25	6·55	23·397	1·207	22·19
From works at Thames Bank; unfiltered.	April 2	14·8	8·6	6·2	24·675	1·645	23·03
Results obtained by the Government Commission in 1851.							
Nearest accessible point to the works of the Company.	Between Jan. 29 and 31.	14·44	—	—	21·28	2·38	18·90

IV.—Water supplied to the Metropolis by the Southwark and Vauxhall Water Company.

Results obtained in 1856.

Description of Water.	Date of Taking.	Hardness.			Solid Constituents, Grains per Gallon.		
		Total.	Permanent.	Temporary.	Total Solid Residue.	Organic Matter.	Inorganic Matter.
From cab stand near Church in Kennington Common; filtered.	Jan. 23	12·02	7.75	4·27	20·57	1·36	19·21
From main at Kennington Church; filtered.	Mar. 27	14·5	9·85	4.65	21·105	1·33	19·775
From pipe from Hampton Works; unfiltered.	Mar. 27	14·25	7·07	7·18	21·927	1·435	20·492
Results obtained by the Government Commission in 1851.							
Nearest accessible point to the works of the Company.	Between Jan. 29 and 31.	15·00	—	—	21·08	1·51	19·57

* Since these samples were taken, the Chelsea Water Company have altered the source of their supply. They now obtain their water at Thames Ditton, but samples from the new source had not been examined when this report was completed.

V.—Water supplied to the Metropolis by the Lambeth Water Company.

Results obtained in 1856.

Description of Water.	Date of Taking.	Hardness.			Solid Constituents, Grains per Gallon.		
		Total.	Permanent.	Temporary.	Total Solid Residue.	Organic Matter.	Inorganic Matter.
From stand pipe at cab-stand, Manor Place, Walworth Road; filtered.	Jan. 23	11·35	8·10	3·25	19·11	1·26	17·85
From stand pipe, Borough Road; filtered.	April 5	12·05	7·6	4·45	20·195	0·80	19·395
From south side of the River at Thames Ditton; unfiltered.	April 11	10·90	8·45	2·45	30·10	3·91	26·18
From north side of the River at Thames Ditton; unfiltered.	April 11	12·55	7·75	4·80	20·205	1·925	18·28
Results obtained by the Government Commission in 1851.							
Nearest accessible point to the works of the Company.	Between Jan. 29 and 31.	14·16	—	—	20·40	2·59	17·81

VI.—Water supplied to the Metropolis by the New River Water Company.

Results obtained in 1856.

Description of Water.	Date of Taking.	Hardness.			Solid Constituents, Grains per Gallon.		
		Total.	Permanent.	Temporary.	Total Solid Residue.	Organic Matter.	Inorgan. Matter.
From stand pipe at cab-stand, Agar Street, Strand; filtered.	Jan. 25	14·6	7·75	6·85	22·36	0·910	21·45
From Agar Street, Strand, filtered.	April 4	12·6	9·25	3·36	21·07	1·015	20·055
From works, unfiltered	April 4	13·1	6·5	9.9	21·91	0·98	20·93
Results obtained by the Government Commission in 1851.							
Nearest accessible point to the works of the Company.	Between Jan. 29 and 31	14·9	—	—	19·50	2·79	16·71

VII.—WATER supplied to the METROPOLIS by the EAST-LONDON WATER COMPANY.

Results obtained in 1856.

Description of Water.	Date of Taking.	Hardness.			Solid Constituents, Grains per Gallon.		
		Total.	Permanent.	Temporary.	Total Solid Residue.	Organic Matter.	Inorgan. Matter.
From stand pipe at cottages near Bow Common; filtered.	Jan. 22	13·98	8·05	5·93	22·17	1·28	20·89
From service pipe at inspector's office; filtered.	April 1	14·65	8·25	6·40	20·685	1·00	19·365
From works at Lea Bridge; unfiltered.	April 1	13·3	6·3	7·0	23·31	0·945	22·365
Results obtained by the Government Commission in 1851.							
Nearest accessible point to the works of the Company.	Between Jan. 29 and 31	15·00	—	—	23·51	4·12	19·39

VIII.—WATER supplied to the METROPOLIS by the KENT WATER COMPANY.

Results obtained in 1856.

Description of Water.	Date of Taking.	Hardness.			Solid Constituents, Grains per Gallon.		
		Total.	Permanent.	Temporary.	Total Solid Residue.	Organic Matter.	Inorgan. Matter.
From service pipe, New Cross; filtered.	Jan. 23	12·45	12·3	0·15	28·49	1·26	27·23
From well at works, as being pumped into mains; filtered.	April 5	11·1	9·3	1·8	23·87	1·19	22·68
From subsiding reservoir, at works, Deptford; unfiltered.	April 5	12·55	8·70	3·85	27·30	1·382	25·918
Results obtained by the Government Commission in 1851.							
Nearest accessible point to the works of the Company.	Between Jan. 29 and 31.	16.0	—	—	29.71	2.61	27.10

IX.—Water supplied to the Metropolis by the Hampstead Water Company.

Results obtained in 1856.

Description of Water.	Date of Taking.	Hardness.			Solid Constituents, Grains per Gallon.		
		Total.	Permanent.	Temporary.	Total Solid Residue.	Organic Matter.	Inorgan. Matter.
From service pipe at cottages, Highgate Hill; mixed.	Jan. 22	10·5	10·5	0·0	34·26	1·29	32·97
From service pipe; mixed.	April 4	5·45	5·40	0·05	30·765	1·47	29·295
From well at Hampstead; unfiltered.	April 4	4·7	3·9	0·8	57·101	2·24	54·861
From the works at Highgate; unfiltered.	April 4	6·35	6·35	0·0	22·54	1·575	20·965
Results obtained by the Government Commission in 1851.							
Nearest accessible point to the works of the Company.	Between Jan. 29 and 31.	9·8	—	—	35·41	1·81	33·57

X.—Water supplied to Woolwich by the Woolwich and Plumstead Water Company.

Results obtained in 1856.

Description of Water.	Date of Taking.	Hardness.			Solid Constituents, Grains per Gallon.		
		Total.	Permanent.	Temporary.	Total Residue.	Organic Matter.	Inorgan. Matter.
From works at Plumstead; softened	Jan. 25	8·15	8·1	0·05	18·84	0·75	18·09
From service tap at the cottages near the railway station, Woolwich Arsenal.	April 5	12·85	10·05	2·80	21·85	1·015	23·835
From well at works; unsoftened.	April 5	22·65	10·25	12·40	33·163	1·05	32·113

The analytical results tabulated in the preceding pages demand but little interpretation. The number

of analytical determinations, although considerable, is not sufficient to furnish the data which are necessary for the elaboration of a definite view regarding the fluctuations in the composition of the waters supplied to the metropolis at different seasons. In fact, the elements which are capable of influencing the composition of the waters are so manifold and liable to such extraordinary variations, that it becomes obvious that the number of estimations has still to be considerably increased. Then only will it be possible to eliminate the influence of accidental disturbances upon the general features of the analysis. It would therefore be premature to enter into a comparative discussion of the results obtained in January and in April, and of the slight discrepancies exhibited by the analyses of the waters of the same Company taken at different localities and under circumstances otherwise different.

A most interesting fact, however, is elicited, if the average result obtained in 1856 be compared with the results of the analyses made in 1851 by the Government Commission.

In the following table these results are placed in juxtaposition :—

Comparison of the average Results obtained in the Analysis of 1856 *with those of the Analysis made in* 1851.

Description of Water.	Date of Taking.	Hardness.			Solid Constituents, Grains per Gallon.		
		Total.	Permanent.	Temporary.	Total solid Residue.	Organic Matter.	Inorganic Matter.
Grand Junction Water Company.	1851	14·00	—	—	21·72	3·07	18·65
	1856	14·87	7·92	6·95	22·59	1·38	21·21
West Middlesex Water Company.	1851	14·60	—	—	22·67	2·75	19·92
	1856	14·28	8·12	6·16	21·03	0·96	20·07
Chelsea Water Company.	1851	14·44	—	—	21·28	2·38	18·90
	1856	13·80	8·63	5·17	22·79	1·42	21·37
Southwark and Vauxhall Water Company.	1851	15·00	—	—	21·08	1·51	19·57
	1856	13·59	8·22	5·37	21·19	1·37	19·82
Lambeth Water Company.	1851	14·16	—	—	20·40	2·59	17·81
	1856	11·98	7·82	4·16	19·84	1·33	18·51
New River Water Company.	1851	14·9	—	—	19·50	2·79	16·71
	1856	13·4	7·8	5·6	21·78	0·968	20·812
East London Water Company.	1851	15·00	—	—	23·51	4·12	19·39
	1856	13·98	7·53	6·45	22·05	1·09	20·96
Kent Water Company.	1851	16·00	—	—	29·71	2·61	27·10
	1856	12·03	10·1	1·93	26·10	1·37	24·73
Hampstead Water Company.	1851	9·8	—	—	35·41	1·84	33·57
	1856	7·43	7·41	0·02	29·19	1·45	27·74

This table shows that the hardness of the waters in 1856, was, with one exception, somewhat less than in 1851; the diminution, however, with one or two exceptions, is only trifling. The total amount of solid matter in the two years likewise exhibits but unimportant fluctuations.

A very considerable diminution, however, is observed in the amount of organic matter.

In fact, in 1856, the waters supplied to the metropolis contained not more than one-half of the organic matter which was present in the year 1851.

This result is certainly not accidental. The diminution is not merely an average result, but uniformly observed throughout. The waters examined in 1851 were taken in January; those investigated in 1856, partly in January and partly in April. The diminution of the organic matter cannot therefore be due to the influence of the season. Nor can it be due to any difference in the mode of determining the organic matter in 1851 and 1856. These determinations were made by exactly the same method; for it so happens that the analytical part of the inquiry in 1851 which refers to the organic matter was likewise made in the laboratory of the Royal College of Chemistry. The diminution is obviously partly due to the alteration of the localities from which many of the Companies derive their supply. The Grand Junction, the West Middlesex, the Southwark and Vauxhall Companies, formerly supplied respectively at Kew, Barnes, and Battersea, derive their present water from Hampton; the Lambeth Water Company used to take their Water at Lambeth, but have now erected extensive works at Thames Ditton. The diminution of the organic matter in the London Water Supply, is however by no means confined to the Companies that have changed the locality of their source, and it must therefore be attributed in a great degree to the con-

siderable improvement which has taken place in the collection, filtration, and general management of the supply of water to the Metropolis.

A. W. Hofmann, F.R.S.
Lindsey Blyth.

APPENDIX.

EXPERIMENTAL NUMBERS from which the Results of the foregoing REPORT are deduced.

The amount of water employed in each case was 1 litre (0.22 gallons); the weights of the solid constituents and of the solid matter are expressed in grammes, one litre being the weight of 1000 grammes of water. The numbers given in the columns of the second half of the Tables represent the quantities of solid constituents and saline matter which are present in 1,000 parts of water.

EXPERIMENTAL NUMBERS.

Name of the Water.	Date of Taking.	Hardness.						Solid Constituents.					
		Temporary and Permanent.			Permanent.			Total solid Residue.			Saline Constituents.		
		I.	II.	Mean.	I.	II.	Mean.	I.	II.	Mean.	I.	II.	Mean.
Grand Junction Water Company.													
Main in Grand Junction Road.	Jan. 18	16·0	15·9	15·95	9·0	9·1	9·05	0·334	—	0·334	0·306	—	0·306
From pipe at works coming from Hampton.	Mar. 29	14·6	14·5	14·55	8·2	8·2	8·2	0·331	0·332	0·315	0·314	0·316	0·315
From stand pipe in Piccadilly.	Mar. 29	14·1	14·1	14·1	6·5	6·5	6·5	0·306	0·300	0·303	0·291	0·286	0·288
West Middlesex Water Company.													
Service pipe near Dorset Square.	Jan. 18	13·5	13·7	13·6	9·3	9·5	9·4	0·291	0,313	0·302	0·279	0·301	0·290
Unfiltered, from Hampton.	Mar. 31	14·8	14·8	14·8	7·6	7·5	7·55	0·319	0·311	0·315	0·304	0·296	0·300
From cab stand, Broadway, Hammersmith, filtered.	Mar. 31	14·3	14·5	14·4	7·4	7·4	7·4	0·285	0·283	0·284	0·272	0·267	0·270
Chelsea Water Company.													
From stand pipe at cab-stand, King Street.	Jan. 22	11·8	11.8	11·8	9·0	9·1	9·05	0·298	0·282	0·290	Lost.	Lost.	Lost.
From works at Thames Bank; unfiltered.	Apr. 2	14·8	14·8	14·8	8·6	8·6	8·6	0·352	0·353	0·352	0·328	0·330	0·329
From stand pipe at cab stand, King Street; filtered.	Apr. 2	14·8	14·8	14·8	8·2	8·3	8·25	0·334	0·334	0·334	0·316	0·318	0·317

Experimental Numbers—*continued.*

Name of the Water.	Date of Taking.	Hardness.						Solid Constituents.					
		Temporary and Permanent.			Permanent.			Total solid Residue.			Saline Constituents.		
		I.	II.	Mean.	I.	II.	Mean.	I.	II.	Mean.	I.	II.	Mean.
Southwark and Vauxhall Water Company.													
From cab stand near church, in Kennington common.	Jan. 23	12·0	12·05	12·02	7·7	7·8	7·75	0·294	0·293	0·293	0·271	0·277	0·274
From main at Kennington church	Mar. 27	14·5	14·5	14·5	9·8	9·9	9·85	0·300	0·303	0·301	0·282	0·283	0.282
From pipe from Hampton at works.	Mar 27	14·3	14·2	14·25	7·05	7·1	7·07	0·311	0·315	0·313	0·291	0·295	0·293
Lambeth Water Company.													
From stand pipe at cab stand, Manor Place, Walworth Road.	Jan. 23	11·5	11·2	11·35	8·1	8·1	8·1	0·272	0·274	0·273	0·257	0·253	0·255
From stand pipe, Borough Road.	Apr. 5	12·05	12·05	12·05	7·6	7·6	7·6	0·290	0·287	0·288	0·278	0·276	0·277
From South side of river at Thames Ditton opposite the works.	Apr. 11	10·9	10·9	10·9	8·5	8·4	8·45	0·433	0·428	0·430	0·375	0·373	0·374
From Thames Ditton, north side of Lambeth works.	Apr. 11	12·5	12·6	12·55	7·7	7·8	7·75	0·290	0·287	0·288	0·262	0·260	0·261

Experimental Numbers—*continued.*

Name of the Water.	Date of Taking.	Hardness.						Solid Constituents.					
		Temporary and Permanent.			Permanent.			Total solid Residue.			Saline Constituents.		
		I.	II.	Mean.	I.	II.	Mean.	I.	II.	Mean.	I.	II.	Mean.
New River Water Company.													
From stand pipe at cab stand, Agar St., Strand.	Jan. 25	14·4	14·8	14·6	7·8	7·7	7.75	0·311	0·328	0·319	0·298	0·315	0·306
From works; unfiltered	Apr. 4	13·1	13·1	13·1	6·5	6·5	6·5	0·310	0·316	0·313	0·296	0·302	0·299
From Agar Street, Strand; filtered.	Apr. 4	12·6	12·6	12·6	9·2	9·3	9·25	0·300	0·302	0·301	0·286	0·287	0·286
East London Water Company.													
From stand pipe at cottages near Bow Common.	Jan. 22	14·05	13·90	13·98	8·1	8·0	8·05	0·300	0·333	0·316	0·283	0·313	0·298
From works at Lea Bridge; unfiltered.	Apr. 1	13·3	13·3	13·3	6·3	6·3	6·3	0·334	0·332	0·333	0·319	0·320	0·319
From service pipe at inspector's office.	Apr. 1	14·7	14·6	14·65	8·2	8·3	8·25	0·297	0·294	0·295	0·281	0·280	0·280
Kent Water Company.													
From service pipe, New Cross.	Jan. 23	12.6	12·3	12·45	12·6	12·0	12·3	0·393	0·421	0·407	0·374	0·403	0·388
From well at works as being pumped into mains.	Apr. 5	11·1	11·1	11·1	9·3	9·3	9·3	0·344	0·339	0·341	0·326	0·323	0·324
From subsiding reservoir, at works, Deptford; unfiltered.	Apr. 5	12·6	12·5	12·5	8·7	8·7	8·7	0·390	0·390	0·390	0·370	0·370	0·370

Experimental Numbers—*continued.*

Name of the Water.	Date of Taking.	Hardness.						Solid Constituents.					
		Temporary and Permanent.			Permanent.			Total Solid Residue.			Saline Constituents.		
		I.	II.	Mean.	I.	II.	Mean.	I.	II.	Mean.	I.	II.	Mean.
Hampstead Water Company.													
From service pipe at cottages, Highgate Hill.	Jan. 22	10·5	10·5	10·5	10·5	10·5	10·5	0·480	0·499	0·489	0·465	0·477	0·471
From service pipe mixed	Apr. 4	5·4	5·5	5·45	5·4	5·4	5·4	0·439	0·440	0·439	0·417	0·420	0·418
From well at Hampstead; unfiltered.	Apr. 4	4·7	4·7	4·7	3·9	3·9	3·9	0·818	0·814	0·816	0·784	0·784	0·784
From pipe from ponds at the works; unfiltered.	Apr. 4	6·4	6·3	6·35	6·4	6·3	6·35	0·320	0·323	0·321	0·298	0·300	0·299
Woolwich and Plumstead Water Company.													
From works at Plumstead.	Jan. 25	8·1	8·2	8·15	8·1	8·1	8·1	0·261	0·277	0·269	0·251	0·265	0·258
From service tap at the cottage near the railway station, Woolwich Arsenal.	Apr. 5	12·9	12·8	12·85	10·05	10·05	10·05	0·352	0·358	0·355	0·338	0·343	0·340
From well at works; unsoftened.	Apr. 5	22·6	22·7	22·65	10·3	10·2	10·25	0·475	0·472	0·474	0·461	0·457	0·459

A. W. Hofmann, F.R.S.
Lindsey Blyth.

PART II.

ENGINEERING.

REPORT on the WORKS of the METROPOLITAN WATER COMPANIES. By the Superintending Inspectors of the Board.

To the Right Honourable WILLIAM COWPER, M.P. &c.

General Board of Health,
Whitehall, 21st July 1856.

SIR,

IN conformity with the instructions which we had the honour to receive from you, to examine the works of the several Metropolitan Water Companies, with the view to a report on the state of those works, and more especially on the mode in which certain requirements of the Metropolis Water Act, 1852, had been carried out, we commenced our investigations on the 21st January last. We now beg to lay before you the following report thereon, the pressure of our ordinary official duties having prevented its completion at an earlier date.

You are aware of the great readiness with which the several companies responded to your request, that such examination of their works might be made, and we are anxious to record, before proceeding further, the obliging attention that we have in every case experienced from the Companies' engineers, who attended us on our several examinations, most freely replied to our inquiries, and furnished every information desired.

The requirements of the Metropolis Water Act referred to are—

1st. "From and after the thirty-first day of August one thousand eight hundred and fifty-five it shall not be lawful for any company supplying the metropolis or any part thereof with water for domestic use, except the governor and company of Chelsea waterworks, to take any water for such purpose from any part of the river Thames below Teddington

Lock, or from any part of any of the tributary rivers or streams of the river Thames below the highest point where the tide flows in such tributary rivers and streams respectively; and from and after the thirty-first day of August one thousand eight hundred and fifty-six it shall not be lawful for the said governor and company of Chelsea waterworks to take any water for domestic use from any part of the river Thames below Teddington Lock.

2d. "From and after the thirty-first day of August one thousand eight hundred and fifty-five every reservoir within a distance in a straight line from Saint Paul's Cathedral in the city of London of not more than five miles, in which water for the supply for domestic use of the metropolis or any part thereof is stored or kept by any company, shall be roofed in or otherwise covered over: provided always, that this provision shall not extend to any reservoir the water from which is subjected by the company to efficient filtration after it is discharged from such reservoir, and before it is passed into the mains or pipes of the company for distribution, or to any reservoir the whole of the water from which is distributed through distinct mains or pipes for other than domestic purposes, nor to any reservoir whatever the water stored in which shall be used exclusively for other than domestic purposes.

3d. "From and after the thirty-first day of December one thousand eight hundred and fifty-five, no water shall be brought or conducted within the metropolis by any company for the purpose of domestic use otherwise than through pipes or through covered aqueducts, unless the same shall be afterwards filtered before distribution.

4th. "From and after the thirty-first day of December one thousand eight hundred and fifty-five, every company shall effectually filter all water supplied by them within the metropolis for domestic use, before the same shall pass into the pipes for distribution, excepting any water which may be pumped from wells into a covered reservoir or aqueduct, without exposure to the atmosphere, and

which shall not be afterwards mixed with unfiltered water.

5th. "Every steam engine furnace, or other work in which coals which produce smoke during combustion shall be consumed by any company for the purpose of the waterworks shall be constructed on the most effectual principle for consuming its own smoke.

6th. "Every company shall, within one year after the passing of this Act, cause a map to be made of the district within which any mains or district mains shall have been laid down or formed by them on a scale not less than six inches to a mile, and shall cause to be marked thereon the course and situation of all existing mains and district mains, and shall, within six months from the making of any alterations or additions, cause the said maps to be from time to time corrected, and such additions made thereto as may show the line and situation of all such mains and district mains as may be laid down or formed by them from time to time after the passing of this Act; and such map, or a copy thereof, with the date expressed thereon of the last time when the same shall have been so corrected as aforesaid, shall be kept in the principal office of each company, and shall be open to the inspection of all persons interested in the same within the said district, who shall be at liberty to take copies of or extracts from the same."

There is a further requirement as to the provision of a constant supply of water to the several districts under certain conditions; but as this clause of the Act will not come into operation until after the expiration of five years from the date of the passing of the Act, we have not entered at any length upon its consideration.

We directed our attention chiefly to the above points; but in the course of our examinations it appeared to us that so much having been required of and accomplished by the several companies to remove from the supplies of water furnished to the metro-

polis the grave objections which attached to them, it was open for consideration whether any other steps might be adopted to render those supplies as perfect as circumstances would possibly admit.

Having regard to our experiences in many places under the Public Health Act, we were led to consider whether it might not be advisable to give early attention to the number of towns (containing in the aggregate a very considerable population) situated above the new sources of supply, and whose drainage may sooner or later seriously tend to the pollution of the water, and to some extent render nugatory the vast outlay which the Companies have been called upon to make.

As Dr. Clark's process also for softening water impregnated with bicarbonate of lime has been prominently brought forward as an important means of further improving the metropolitan supply, we have, in accordance with your directions, given special attention to the works executed for this purpose by the Plumstead, Woolwich, and Charlton Water Company.

Upon these questions therefore we shall beg to offer some remarks at the close of our report.

We have found that although our inquiries were chiefly directed to specific points connected with the metropolitan water supply, facilities offered for gaining a complete view of the works in the aggregate, as they at present exist. We had no doubt you would consider it desirable that we should avail ourselves of this opportunity, and we have therefore conducted our inquiries and framed our report accordingly.

An elaborate return having been made to the General Board of Health, in 1850, by the several water companies, we have abstracted from those documents the state of the works of each company at that time, and furnished in a separate return, compiled from our inquiries, the additional works executed since that period, in order that the extent of the recent improvements may be more apparent; and have then given a summary of the whole, exhibiting the complete works which together make up the entire Metropolitan Water Supply.

The old metropolitan water companies were nine in number, but as the Plumstead, Woolwich, and Charlton Water-works have been recently established for the supply of a district comprised within "the Act for the better local management of the metropolis," that company should be added to the number, and we have therefore included a description of the works executed by them.

Five of these ten companies take their supplies from the river Thames, namely:—

The Chelsea	Company,
The Grand Junction	,,
The Southwark and Vauxhall	,,
The Lambeth	,,
The West Middlesex	,,

The other five companies have the following sources of supply:—

The New River Company's sources remain unaltered. The supply is obtained partly from certain wells and springs in various places, but chiefly from the river Lea, near Hertford.

The East London Company derive their water wholly from the river Lea, but it is now taken from a point considerably higher up the river than formerly.

The Kent Company have for their source the river Ravensbourne, the point from which the supply is drawn being unaltered.

The Hampstead Company, from the first, obtained their small supply from certain ponds and wells, but have more recently been assisted by supplies from the New River and the West Middlesex Companies.

The Plumstead, Woolwich, and Charlton Consumers' Pure Water Company derive their supply from a well and boring sunk into the chalk, above the town of Woolwich.

We have appended a general plan of the metropolis, distinguishing in different colours the areas of the districts now severally supplied by these Companies, and showing in the same colours the sites of their works

and reservoirs, and the connecting mains between the sources of supply and the districts.

The Lambeth Company, in deference to the great complaints which were made of the foul state of the water supplied by them, anticipated the general Act of 1852, and obtained powers in 1847 for the alteration of the source of their supply.

The Chelsea Company were allowed by the Act of 1852 a longer period of time than the other companies, namely, until the 31st of August of the present year, for the completion of the arrangements necessary for obtaining their supply from above the tidal influence. We were apprehensive therefore that we should not have the opportunity, by the time our report must be presented, of seeing these works sufficiently advanced to enable us to include a full description of the arrangements for furnishing the new supply to the district; but we are happy to state that such rapid progress has been made with the works as to allow of the supply being furnished from the new source before the expiration of the time allowed by the Act. The Company have selected a site for their works called "Seething Wells," adjoining the works of the Lambeth Company at Thames Ditton.

The Grand Junction, the Southwark and Vauxhall, and the West Middlesex Companies, have established their new works on three contiguous plots of land, on the banks of the river Thames, at Hampton, and have erected buildings of similar design, which combine to produce an important effect. The mains of these three Companies from Hampton to their several establishments in London run in parallel direction, as shown on the plan, as far as Twickenham, and at the point of divergence from each other, means of communication between the three have been formed for mutual aid in case of accident or repair.

We commenced our examinations at the Hampton works.

THE WORKS OF THE GRAND JUNCTION WATER COMPANY IN 1850,

Described chiefly from the Return of the Company to the General Board of Health at that date.

The Company's Acts of Parliament were respectively,—51 Geo. III. c. 169.; 56 Geo. III. c. 4.; 59 Geo. III. c. 111.; 7 Geo. IV. c. 140.; 5 & 6 Will. IV. c. 95.; 7 & 8 Vict. c. 30.

Source of Supply.—The Company was incorporated to exercise powers of water supply originally granted to the Grand Junction Canal Company, and at first distributed water taken from that canal. In 1821–22 they changed their source of supply to the River Thames. In effecting this alteration, the mouth of the intake culvert-pipe was placed in close proximity to the outlet of the Ranelagh sewer in the river. In 1834 a further change was made, and a point higher up, on the Surrey side of the Thames, 360 yards above Kew-bridge, was selected, where the stream is separated from the Brentford or Middlesex side of the river by an ait commencing about 150 yards above Kew-bridge, and extending in length nearly half a mile The water, after passing through an iron pipe, laid down in the bed of the river, was received into a well eight feet diameter, and about 22 feet in depth, whence it was pumped into a depositing reservoir.

Reservoirs.—The total capacity of the reservoirs and filter beds (five in number) was 17,900,000 gallons, arranged as follows:—

Depositing reservoirs at Kew-bridge,	5,000,000
Filter beds at ditto -	- 3,500,000
Store reservoir at Campden-hill	- 6,000,000
Store reservoir at Paddington	- 3,400,000

The reservoir at Paddington, which is about 89 feet above the level of Trinity high-water mark, was lined with brick, and the bottom coated with gravel.

Filtration.—The filter beds adjoining the depositing reservoirs at Kew-bridge contained an area of 70,078 superficial feet. The water in the filter beds varied in depth from three to seven feet, as it was required; but all the water passed through the filter before it was pumped into the service reservoirs and mains for distribution. The filtering medium consisted of layers of gravel and sand arranged in the following order, viz.:

	Ft.	In.	
1. Rough gravel that will not pass through a screen of 2-inch mesh	0	7½	thick.
2. Gravel that will not pass through a screen of 1-inch mesh - -	0	6	„
3. Gravel that has passed through the screen of 1-inch mesh - -	0	9	„
4. Small shells - - -	0	1¼	„
5. Coarse sharp sand - -	0	6	„
6. Fine sharp sand - - -	1	6	„
Total thickness of filtering medium	4	0	

Engine Power.—The total amount of steam power was equal to about 840 horses, comprised in seven engines, as follows:—

1. Grand Junction engine,		300	horse power.
2. Maudslay's	do.	130	„
3. East Cornish	do.	130	„
4. West Cornish	do.	130	„
5. Paddington	do.	70	„
6. North filter	do.	40	„
7. South filter	do.	40	„

Mains and Branches.—The length of the iron mains and branches was about 80 miles one furlong and 17 yards, and the sizes varied from 30 inches diameter to three inches.

Quantity of water pumped.—The total quantity of water pumped for supplying the district from the 1st October 1848 to 29th September 1849 was 1,289,184,930 gallons. The daily quantity delivered

per house, including all purposes, appears to have been nearly 255 gallons.

Tenements supplied.—The number of tenements supplied with water, including those on the high service, and trades and large consumers, was 14,058; of these no less a number than 11,485 were rated under 5*l.* per annum, and about 200 were large consumers.

The supply was given every day, except Sunday, throughout the whole of the Company's district.

The highest service afforded by the Company, was about 150 feet above Trinity high-water mark, and the lowest 12 feet above that level.

Cost of the works.—The total expenditure, up to December 1849, amounted to 522,295*l.* 4*s.* 9*d.*

Alterations and Additions under the following Acts:

The Metropolis Water Act, 15 & 16 Vict. c. 84.
The Grand Junction Waterworks Act, 15 & 16 Vict. c. 157.

New source of supply.—The river Thames at Hampton, at the point whence the Southwark and Vauxhall Company and the West Middlesex Company draw their supplies, a quarter of a mile above Hampton village, six miles above Teddington Lock, and 26 miles above London Bridge. The water was first supplied from the new source by the Grand Junction Company on the 7th August 1855.

Works at Hampton.—The intake from the river is two feet six inches below the maximum summer level. It is not in the main channel, there being an ait opposite the works which somewhat protects the water from the disturbance of barges and other traffic. The water has to pass three sets of galvanized iron strainers of different sized mesh before entering two subsiding reservoirs, of 45,000 superficial feet each, and capable of holding from six to ten million gallons, the actual quantity contained in them varying

with the height of the stream. The water flows from these reservoirs to the pumping well.

The engine-power consists of two Cornish engines of 110 horse-power each. The cylinders are 60 inches in diameter with a 10-feet stroke. The poles are 42 inches in diameter with a 10-feet stroke. There is a stand pipe 90 feet high, to the top of which the engines are calculated to raise twenty-two million gallons of water in twenty-four hours.

These works are connected with the Company's distributing works at Kew Bridge by a main of 33 inches in diameter, and about 13,500 yards in length. It passes through Twickenham, Isleworth, and Brentford.

Works at Kew and Kensington.—The reservoirs and filter beds at Kew remain the same in number as before, but they have been enlarged. The two reservoirs cover an area of 245,000 superficial feet, affording about three days' subsidence, and the three filter beds comprise 225,000 superficial feet. The filtering medium now consists of

1. Harwich sand, . from 3 to 4 feet thick.
2. Fine gravel - - - 1 foot thick.
3. Fine screened gravel - 9 inches thick.
4. Rough screened gravel - 9 inches thick.
5. Coarse gravel - - 1 foot thick.

The bottom layer is formed to a current each way to the lines of drains on a concrete floor.

The Company possess, at Kew, a large area of spare land for additional works when required.

The open service reservoir at Campden Hill, Kensington, is now being covered (in compliance with the provisions of the Metropolis Water Act, 1852), it being within a distance of five miles from St. Paul's Cathedral. The covering consists of perforated brick arches nine inches in thickness, 20 feet span, springing from girders supported on iron columns. The arches are covered with asphalte, upon which a thickness of soil will be laid and sown with grass. This reservoir has now an area of 46,800 square feet, with 22 feet depth of water. The cost of the covering will be 8,000*l.*

Two engines, with 70 inch cylinders, and of the aggregate power of 300 horses, with nine boilers, and stand pipe of 150 feet high, are in course of erection at Campden Hill, and there will be space in the engine-house for a third similar engine. The height of service from the stand pipe will be 250 feet above Trinity high-water mark. It is expected that the whole of the works at Campden Hill will be completed by Midsummer next year.

One additional engine, of 150 horse-power, and four additional boilers, are in progress of erection at Kew, making a total engine-power of 920 horses, and 11 boilers, at that spot.

The reservoir and engine at Paddington have been abolished.

Mains and Branches.—The mains and branch pipes of this Company now measure about 117 miles; 37 miles having been laid since the previous return.

The plan of the mains and district mains, required by the 17th section of the Metropolis Water Act, 1852, is complete. It is laid down to a scale of 12 inches to the mile.

"*Consumption of smoke.*"—No apparatus has been adopted at Kew for the "consumption" of the smoke of the furnaces. Very perceptible smoke was emitted from the chimney while we were present, but it was not dense.

Quantity of water supplied.—The mean supply to the district during last year was 6,714,292 gallons, per day, distributed throughout the whole of the district daily, and the number of tenements now supplied amounts to 17,221.

The district to which the supply is given, and the positions of the works, are distinguished by brown colour on the accompanying plan.

Total cost of the works.—The cost of the additional works executed since the passing of the Acts of 1852 had amounted, on the 31st March 1856, to the sum of 166,128*l.* To this amount, however, should be added the contracts in actual execution, amounting to 45,000*l.*, which will make with the previous outlay, a total expenditure of 733,423*l.*

General Remarks.

The new buildings of this Company at Hampton, as well as of the Southwark and Vauxhall, and the West Middlesex Companies, are of Italian design, executed in white brick with stone dressings. They consist of engine and boiler-houses, cottages for the workmen, and a square tower which contains the chimney and a stand-pipe, 90 feet high, 4 feet 6 inches in diameter.

It is proposed to burn Welsh coal in the furnaces, but Newcastle coal having hitherto been used, the ornamental tower is already somewhat disfigured by smoke.

The most noticeable part of the works at Hampton, are the direct acting engines, erected by Harvey and West, which are working steadily and well. They are nominally of 100 horse-power, but work up to 110. It is proposed to pump 11 hours per day, 12 strokes per minute in ordinary work, 14 strokes in full work.

The water was turbid at the time of our inspection at Hampton, owing to recent rains. The filtered water at Kew was however bright, and pleasant to drink.

The time of cleansing the filter beds varies from a few days to eight weeks, according to the state of the river. Considerable attention is paid to the washing of the sand for filtration. The operation costs 8½*d.* per cubic yard.

With two feet head of water on the filter beds, about three gallons per hour pass through each square foot when in good working order.

The reservoir at Campden Hill, Kensington, is at present the only reservoir of this Company for filtered water. The works at this place, described in the return, were not complete at the time of our visit, but were in rapid progress. In the mean time the supply for the whole of the district is pumped directly into the distributing mains.

The Company has purchased land at Shoot-up-Hill, near Hampstead Heath, at an elevation of 260 feet above the Thames, for the formation of another large reservoir.

The whole of the new works of this Company appear to be most efficiently carried out with a due regard to economy.

THE WORKS OF THE SOUTHWARK AND VAUXHALL COMPANY IN 1850,

Described chiefly from the Return of the Company to the General Board of Health at that date.

The Vauxhall Company was constituted by 45 Geo. III. c. 119., 53 Geo. III. c. 155., and 4 & 5 Will. IV. c. 78.
The Southwark Company was constituted by 4 & 5 Will. IV. c. 79.
The two Companies were incorporated by 8 Vict. c. 69.

Source of supply.—The Company took its supply of water from the river Thames, near the Red House, Battersea, by means of a galvanized iron pipe 4 feet in diameter, laid to the full current of the river, considerably below low-water mark. The water was admitted first into a subsiding reservoir, from which it passed into a second, and thence into two filter beds, from which a 4-feet iron culvert conducted it to the pumps at the engines. It was then forced over stand pipes to a height of 185 feet above Trinity high-water mark, into the mains for distribution.

Reservoirs.—The capacity of the two depositing reservoirs and two filter beds at Battersea was equal to 43,000,000 gallons, the depositing reservoirs being capable of holding 32,000,000 gallons, and the filter beds 11,000,000 gallons. The area of the reservoirs and filter beds amounted to 491,000 superficial feet, the depositing reservoirs having a surface of 370,000 feet, and the filter beds 121,000 feet.

Filtration.—The only parliamentary obligation to which the Company was subjected as to the quality of the water supplied was, that it should be filtered. They, however, made arrangements for securing the

best supply practicable from that source by taking water only during the ebb tide.

The filtering medium was 5 ft. 6 inches thick, and consisted of

1st. A layer of clean sharp *river* sand, 2 ft. thick.
2d. A layer of fine gravel, 1 ft. thick.
3d. A layer of fine screened gravel, 9 inches thick.
4th. A layer of rough screened gravel, 9 inches thick.
5th. A layer of coarse gravel, 1 foot thick. This bottom layer was formed to a current each way to the lines of drains on a concrete floor.

Engine power.—The steam power of the four engines employed amounted nominally to about 355 horses :—

No. 1. engine, cylinder 64 inches. diameter, stroke 10 feet 6 inches.
„ pumps, 32 inches diameter, stroke 10 feet.
No. 2. engine, cylinder 64 inches diameter, stroke 11 feet 8 inches.
„ pumps, 33¼ inches diameter, stroke 10 feet 6 inches.
No. 3. engine, cylinder 31 inches diameter, stroke 6 feet 3 inches.
„ pumps 21½ inches diameter, stroke 3 feet 7½ inches.
No. 4. engine, combined cylinders 24 and 40 inches diameter, with an 8 feet stroke.
„ pumps 60 inches diameter, stroke 8 feet.

Mains and Branches.— The length of mains, branches, and services amounted to about 380 miles.

Quantity of water pumped.—The total quantity of water pumped during the year 1849 was 2,195,006,370 gallons.

The highest service afforded by the Company, was about 150 feet above Trinity high-water mark, and the lowest service below high water.

Tenements supplied.—The number of tenements supplied was 34,864, of which about 1,000 were on

the main, and had nearly a constant supply. The number of large consumers was 647.

The average quantity delivered to each dwelling house, for seven days in the week, was 143 gallons per diem.

The supply of water was given daily throughout the whole of the Company's district.

Cost of Works.—The total expenditure on the Works up to December 1849 was 435,247*l.*

Alterations and Additions under the following Acts :

The Metropolis Water Act, 15 & 16 Vict. c. 84.
The Southwark and Vauxhall Water works Act, 15 & 16 Vict. c. 158.

Source of Supply.—The river Thames at Hampton, at the point whence the Grand Junction and the West Middlesex Companies draw their supplies. The water was first supplied by the Southwark and Vauxhall Company from this source on the 19th July 1855.

Works at Hampton.—The intake from the river adjoins that of the Grand Junction Company, and the water passes through three sets of strainers, as before described, into two subsiding reservoirs of 45,000 superficial feet each, and capable of holding from six to ten million gallons, the actual quantity varying with the height of the stream.

The engine power at Hampton consists of two Cornish engines, built by Harvey and West, of 110 horse-power each. The cylinders are 60 inches in diameter, with 10-feet stroke. The poles are 42 inches in diameter, with 10-feet stroke. There is a stand pipe 90 feet high, to the top of which the engines are calculated to raise 22 million gallons of water in 24 hours. Four cottages have been erected for enginemen, &c. The main to Battersea is 36 inches in diameter, and about 23,000 yards in length. It passes through Twickenham, under the Thames, and then through Richmond, Putney and Wandsworth to

Battersea. It is connected with the Grand Junction Company's main at Hampton, and with the West Middlesex Company's main at Mortlake, for mutual aid in case of accidents.

Filter Beds and Works of Distribution at Battersea.—The two reservoirs of deposit and subsidence at Battersea are of the aggregate capacity of twenty million gallons. One circular filter bed of 75,000 superficial feet, has been added to the works. The whole of the filtering beds are now capable of filtering an aggregate of 18 million gallons per diem.

From one to two feet of sharp sand have been added to the former thickness of the filtering medium already described. Harwich sand is now chiefly used.

A Cornish engine of 170 horse-power has been substituted at Battersea for the old lifting engine of 30 horse-power, formerly used for raising the water directly from the river, which is no longer required. Two new boilers have been added, making a total of 11.

An engine-house is built, and ready to receive an additional engine of 350 horse-power, with 112-inch cylinder, and 50-inch pump.

Mains and Branches.—The total length of pipeage now amounts to about 432 miles. The plan of the mains and district mains, required by the 17th section of the Metropolis Water Act, 1852, is complete. It is drawn to a scale of 100 feet to the inch.

"*Consumption of Smoke.*"—No apparatus has been adopted for the "consumption" of smoke of the furnaces. Welsh coal is now used.

Quantity of Water supplied.—The mean supply of water to the district during the year 1855, was 10,331,122 gallons per day. The supply is given daily, for six days in the week, and two million gallons are furnished on Sundays.

The number of tenements now supplied amounts to 41,529, including 641 large consumers.

The area of the district at present supplied by this Company and the sites of the works are shown in pink

colour on the accompanying plan. The middle portion of the district, where the two colours on the plan are intermixed, is also supplied by the Lambeth Company.

Total Cost of the Works.—The cost of the additional works executed under the Acts of 1852 has amounted to £186,510. To this sum should be added the contracts in actual execution, which amount to £27,500, making, with the previous outlay, a total expenditure of £649,257.

General Remarks.

It will be seen from the foregoing returns that the works of this Company at Hampton are precisely similar to those of the Grand Junction Company; with the exception of the size of the mains for conveying the water thence to the works at Kew and Battersea.

The new direct-acting engine of 170 horse-power, erected at Battersea, is contained in the building which formerly held the 30-horse engine used for lifting the water from the river to the contiguous reservoirs. The new engine occupies less space than the former one, although of such increased power. The whole of the new works appear to have been well and economically carried out.

The filtered water at the Battersea Works was bright and pleasant to drink, notwithstanding the turbid state of the river. This Company has no reservoir of filtered water. The supply is pumped direct over the stand pipes into the mains for the service of the district. Land has been purchased, however, for reservoirs at Nunhead, Peckham, at a level of 210 feet above high-water mark.

The connection between the river and the reservoirs at the Battersea works, by which the supply was formerly obtained, has not yet been actually removed, but a dam has been put across to prevent the use of this intake.

The Company not having taken sufficient precautions to prevent the issue of dense smoke from the furnaces at Battersea, were, on one occasion, fined 5*l.* for offending in this respect. Welsh coal is now used. A greater body of smoke than is usually due to Welsh coal was emitted during our visit, but it could not be called dense.

THE WORKS OF THE WEST MIDDLESEX WATER COMPANY IN 1850,

Described chiefly from the Return of the Company to the General Board of Health at that date.

The Acts obtained by the West Middlesex Company prior to 1850 were three in number, viz.,—

46 Geo. III. c. 119.
50 Geo. III. c. 132., and
53 Geo. III. c. 159.

Source of supply.—The Company obtained their supply of water from the river Thames, near Barnes-terrace, in the parish of Barnes, about ten miles above London-bridge.

Reservoirs.—The water passed into two subsiding reservoirs, comprising an area of about 16 acres. It was led through a duct from the Thames first into the western and thence into the eastern reservoir.

These reservoirs were also partially supplied with water through the gravelly beds of the district. From the lower reservoir the water was conveyed by means of a 36-inch iron pipe across the bed of the river to the pumping-well on the Middlesex side.

In addition to these subsiding reservoirs the Company had in use two service reservoirs, situate at Kensington, and at Barrow-hill,—that at Kensington being capable of containing 3,450,000 gallons, and that at Barrow-hill 4,752,000 gallons.

The Kensington reservoir is 111 feet above the level of Trinity high-water mark. The Barrow-hill reservoir is 177 feet 6 inches above the same level.

The highest service afforded by the Company, was 207 feet above Trinity high-water mark, and the lowest about 20 feet.

Filtration.—The water was not filtered. Its freedom from matter in suspension was dependent solely on subsidence in the reservoirs.

Engine Power.—The nominal power of the three engines at Hammersmith was 245 horses.

No. 1. 54-inch cylinder, 8 feet stroke; pump, 20 inches diameter, 8 feet stroke.

No. 2. 54-inch cylinder, 8 feet stroke; pump, 20 inches diameter, 8 feet stroke.

No. 3. 64-inch cylinder, 8 feet stroke; pump, 23 inches diameter, 8 feet stroke.

Mains, Branches, &c.—The total length of mains, branches, and service pipes was about 150½ miles; they varied in diameter from 30 inches to 3 inches.

Quantity of Water pumped.—The total quantity of water pumped in the year 1849 was 1,216,929,812 gallons; about 144 gallons having been delivered to each house per diem.

Tenements supplied.—The number of houses supplied by the Company was 24,480. The instances in which parties had pipes on the mains were very rare, and there were very few large consumers. The district is almost exclusively one of houses.

The supply was given in all cases three times a week, and more frequently in parts of the district where it was required.

Cost of the Works.—The total cost of the works to the end of the year 1849 was 648,560*l.* 6*s.* 1*d.*

Alterations and Additions under the following Acts:

The Metropolis Water Act, 15 & 16 Vict. c. 84.
The West Middlesex Waterworks Act, 15 & 16 Vict. c. 159.

Source of Supply.—The river Thames at Hampton, near the point whence the Southwark and Vauxhall, and Grand Junction Companies draw their supplies.

Water was first supplied to the Company's district from this source on the 19th July 1855.

Works at Hampton.—The intake from the river is separate from those of the other two Companies. It is provided with a double set of wire screens, and is further protected at the mouth by a line of sheet piling in the river, which keeps off all floating substances. There is no subsiding reservoir in connexion with these works, as with the contiguous works of the two other Companies. The water flows direct from the river to the engine well, through a pipe four feet in diameter. The supply can be stopped by means of sluices. The water is pumped direct to Barnes, a distance of about $8\frac{3}{4}$ miles. The diameter of the main is 36 inches. It runs parallel with the Southwark and Vauxhall main as far as Mortlake, whence it diverges to Barnes.

The engine-power consists of two Cornish engines, direct action, with 64-inch cylinders and 10 feet stroke. The poles are 45 inches in diameter with 10 feet stroke.

Filter Beds, &c., at Barnes.—The water from Hampton is delivered into the two subsiding reservoirs at Barnes, which were previously used for the subsidence of the water drawn from the Thames at that point. These contain about six days' supply.

Three filter beds have been constructed at Barnes, each comprising $1\frac{1}{2}$ acres in superficial area (sand surface.)

The filtering medium is 4 feet 6 inches in depth, and is thus composed :—

Feet.	Inches.	
2	9	Thames sand
1	9	Hoggin and gravel of various sizes.
4	6	

The water passes from the filter beds into a pure water well, whence it is conducted as before to the engines on the other side of the river. Filtered water was first supplied on the 27th March 1854.

Service Reservoirs.—It is proposed to abandon the service reservoir at Kensington, in order to save the cost of covering it, it being within the five-mile radius limited by the Metropolis Water Act, 1852.

The service reservoir at Barrow Hill, Regent's Park, which comprises an area of $1\frac{3}{4}$ acres, has been covered with a series of hollow brick arches, six inches thick, of 20 feet span, and 3 feet rise, springing from cross arches constructed on brick piers.

The depth of the reservoir is 20 feet.

The lower portion of the district is supplied direct from the distributing mains, without the intervention of any reservoir. The higher portion is supplied from the service reservoir at Barrow Hill, which is filled from the main by night.

Engine-power.—In addition to the new engines at Hampton already described, a new engine has been erected at Hammersmith, with 72-inch cylinder, 10-feet stroke, and double action pump, 23 inches diameter. Two new boilers have also been added.

A new engine has also been erected at Barrow Hill, 16 inch cylinder, 5-feet stroke, for the purpose of supplying a part of the district above this reservoir.

The total of the engines of this Company may now be taken at 480 nominal horse-power.

Mains, Branches, &c.—The total length of pipeage now laid is about 178 miles; about 28 miles have been laid since the return made in 1850.

A plan of the Company's under-ground works, to a scale of 5 feet to the mile, has been prepared in accordance with the Metropolis Water Act, 1852, and is now in course of correction to Midsummer last.

"*Consumption of Smoke.*"—No apparatus has been attached to the furnaces of this Company for the "consumption" of smoke. Welsh coal and screenings are used for the fires. The screenings being used in front, the smoke passes over the live Welsh coal and is converted into flame.

Quantity of Water supplied.—The average quantity of water distributed daily, for the week of 7 days, ending the 4th July, was 6,895,368 gallons.

The number of tenements now supplied, exclusive of stables, is 25,732.

The water is furnished to all parts of the district daily, Sundays excepted, and to some parts twice a day.

The area of the district at present supplied by this Company, and the works and reservoirs, are coloured blue on the accompanying plan.

Cost of Works.—The total cost of the additional works executed since the passing of the Company's Act of 1852, to the 30th March last, has amounted to 157,399*l.* 14*s.* 7*d.*, making with the previous outlay, a total expenditure of 805,950*l.* 0*s.* 8*d.*

General Remarks.

The buildings and engines of this Company at Hampton are similar to those of the Grand Junction, and of the Southwark and Vauxhall Companies, except that the engines are of somewhat larger dimensions, as described in the return.

The air vessel is here of wrought iron, 5 feet in diameter and 18 feet high.

Thirty feet height of water in the stand pipe is sufficient pressure to command its delivery at Barnes.

Working with 4 feet head of water, about six gallons per hour are stated to pass through each square foot of surface of the filter beds. They are cleansed at intervals varying from 10 days to 7 or 8 weeks, according to the state of the river. The river was turbid at the time of our inspection.

The water is conducted across the river to the engines at Hammersmith by the same main in the bed of the river which previously took the supply from the subsiding reservoirs. The direct connexion of this main with the subsiding reservoirs still remains. It is stated to be maintained in case of accident to the filter beds,

but as the filter beds are arranged in three distinct divisions, this precaution appears to be wholly unnecessary, and it would be more satisfactory that the connexion with unfiltered water should be destroyed. The filtered water was bright and pleasant to the taste, very different to the water taken from the reservoirs. Even after the subsidence which the water undergoes in passing through the reservoirs, it is by no means fit for domestic use.

At Hammersmith the water is pumped direct into the distributing mains without any stand pipe, the air vessel being similar to that at Hampton.

The covering of the Barrow Hill reservoir appears to have been an economical as well as an efficient work. The cost was about £5,000. The arches have a slight covering of cement, but no soil is laid over them, the ventilation through the hollow brickwork of which they are composed being found sufficient to keep the water cool. The temperature of the water in the reservoir has been found to be raised only 3 degrees during summer.

THE WORKS OF THE LAMBETH WATER COMPANY IN 1850,

Described chiefly from the Return of the Company to the General Board of Health at that date.

The Lambeth Water Company was incorporated by 25 Geo. III. c. 89., and they obtained further legislative powers by 4 Will. IV. c. 7., and 11 Vict. c. 7.

Sources of supply.— The Company's authorized source of supply, until the passing of the Act 11 Vict. c. 7., was the River Thames at Lambeth. The latter Act enabled the Company to obtain their supply of water from the same river, above the tidal influence, at Thames Ditton.

Reservoirs.—The available capacity of the Company's reservoirs, three in number, was 15,900,000 gallons. Two at Brixton, formed with brick walls and paved bottom, comprised about three acres in extent, and were calculated to contain, when full, 12,150,000 gallons; the third, $1\frac{1}{4}$ acres in extent, having brick walls and earth bottom, was capable of holding 3,750,000 gallons.

Filtration.—The whole of the water supplied was passed through a vertical filtering medium of gravel and sand about seven feet thick.

Steam power.—The amount of steam power employed was stated nominally at 252 horses; the engines, five in number, being of the following dimensions:—

No. 1. Engine cylinder, $64\frac{3}{8}$ inches diameter; stroke, 8 feet.
No. 2. Engine cylinder, $46\frac{1}{2}$ inches diameter; stroke, $8\frac{1}{2}$ feet.
No. 3. Engine cylinder, $20\frac{1}{2}$ inches diameter; stroke, 3 feet.
No. 4. Engine cylinder, $16\frac{1}{4}$ inches diameter; stroke, 3 feet.
No. 5. Engine cylinder, 11 inches diameter; stroke, $2\frac{2}{3}$ feet.

Mains, Branches, &c.—The length of mains, branch mains, side services, and services for small streets, was about 135 miles, varying in size from 23 inches in diameter to two inches.

Quantity of water pumped.—The total quantity of water pumped for supplying the district during the year 1849 was 1,123,200,000 gallons. The quantity supplied for all purposes gave an average of 154 gallons per house per diem.

Tenements supplied.—The number of dwelling-houses supplied amounted to 23,396; and large consumers (from the mains), 147.

The highest service afforded by the Company was about 350 feet above high-water, and the lowest, 4 and 5 feet *below* high-water mark.

The supply was given daily to the district lying below St. Matthew's Church, Brixton, forming nine-tenths of the entire district. The more distant and elevated localities received their supply of water three and four days per week.

Cost of the works.—The total expenditure on the works amounted to 307,352*l.* 8*s.* 1*d.*

Alterations and Additions under the following Acts:

Lambeth Waterworks Act, 11 Vict. c. 7., 1847.
The Metropolis Water Act, 15 & 16 Vict. c. 84.

Source of Supply.—The river Thames, between Kingston and Thames Ditton, whence the supply has been drawn since January 1852.

Filter Beds and Reservoirs.—The water is let in direct from the river to the filter beds, and after filtration is pumped to the reservoirs at Brixton. There are four double filter beds at Thames Ditton, but they comprise only altogether an area of 32,000 superficial feet, which will be found a very small extent of filtering surface in comparison with that of the other Companies. These filter beds, constructed with brick retaining walls, immediately adjoin the river. The filtering medium is about 6 feet in thickness, and consists of Thames and Harwich sand, and fine and coarse gravel in layers.

The two reservoirs at Brixton, comprising an area of 3 acres, have now been covered. They were each originally divided lengthwise by a wall, to effect a circulation of the water, and this arrangement is still retained. The covering consists of brick arches 9 inches thick, springing from walls 1½ bricks thick, and 20 feet from centre to centre. These walls have large openings in them, with buttresses between.

The Streatham reservoir remains uncovered, it being situated beyond the five miles radius from St. Paul's Cathedral prescribed by the Act for covered reservoirs.

Engine power.—The aggregate nominal engine power of the Lambeth Water Company is now equal to 680 horses. Two pair of W. Simpson's engines of similar construction, and of excellent and substantial design, have been erected at Kingston. One pair is sufficient for the ordinary duty.

The new engines are of the combined high pressure and condensing description. The high pressure cylinders have 28 inches diameter, length of stroke 5 feet $6\frac{1}{2}$ inches. The low pressure cylinders have 46 inches diameter, and 8 feet length of stroke. They are worked from cylindrical boilers with central furnaces and flues.

A small engine is also erected here for draining the filter beds when cleansing is required.

A pair of small engines at Brixton raise the water thence to the higher reservoir at Streatham.

The old engines described in the previous return have been disposed of.

Mains, Branches, &c.—The main from Thames Ditton to the Brixton reservoirs for the supply of the district is 30 inches in diameter, and $10\frac{1}{3}$ miles in length. With the view to future extensions, three lines of main have been laid at all the crossings; and wherever the main passes through private property sufficient width of land has been purchased for laying three parallel lines.

The total length of pipeage now laid is 206 miles. The additional length laid in the district since the previous return being 71 miles.

The plan of the Company's mains and district mains, required by the Metropolis Water Act, is complete, having been corrected to June last. It is on a scale of 16 inches to the mile.

"*Consumption of Smoke.*"—No apparatus is employed for the consumption of smoke of the furnaces. Welsh coal is used.

Quantity of Water supplied.—The average supply of water in 1855 was 6,109,000 gallons per diem, and during this summer it has amounted to nearly seven million gallons.

The number of tenements supplied is 28,541. Nine-tenths of the district is supplied daily, and the remainder on the high land in the country districts four times per week.

The area of the district at present supplied by this Company, and the positions of the works, are coloured blue on the accompanying plan. It will be observed that a considerable portion of the district is supplied also by the Southwark and Vauxhall Company.

The total expenditure under the new Acts of 1847 and 1852, to the present time, has amounted to 301,633*l.*, making with the previous outlay a total expenditure of 608,985*l.* 8*s.*

General Remarks.

The whole of the works of this Company at Thames Ditton were executed under the powers obtained in 1847; but as they were merely anticipatory of the General Act of 1852, being precisely of the character that would have been carried out under the provisions of that Act, which require that the sources of supply from the Thames should be above the tidal influence, we have thought it right to include them as new additions.

These works are situated on a strip of land partly embanked from the river to an uniform line. There is sufficient area of land for a considerable extension of the works, which have been laid out on a comprehensive scale, and have been efficiently executed.

The substantial brick buildings consist of engine and boiler houses, chimney in form of a square castellated tower, workshops, offices, extensive coal shed, and a range of baths and other sanitary arrangements for the workmen.

The river was turbid at the time of our visit to Kingston, but the filtered water was bright and pleasant as the samples of the other Companies. When the river is so charged with matter in suspension, a filter bed is said to run freely only for about three days.

The drainage of Thames Ditton formerly discharged into the river above the site of these works. An intercepting sewer, 3 feet 6 inches by 2 feet 6 inches in diameter, has been laid down by the Company, extending for about a mile and a half above the intake of their supply of water, and for about half a mile below, for discharge of this drainage. Power has been taken in the Company's Act to carry the sewer as far up as Moulsey for the same purpose.

The pumps are of double action; the water being raised by the up-stroke as well as the down, and driven forward direct into the mains. No stand-pipe is employed, but in addition to the ordinary air-vessel, there is an air-chamber formed above the pump-valves, into which air is constantly pumped.

The covering of the two reservoirs at Brixton, comprising an area of about three acres, cost about 13,500*l*. The whole surface of the arches is covered with soil, and laid down in grass.

The accident which occurred here from the fall of some of the arches arose from no deficiency of construction, for the work is of the most solid description, but from the too early removal of the centreing. Only four sets of centres were employed by the contractor. The engineer afterwards required that the whole of each line should be put in at one time. One of these reservoirs was completed and at work before the 31st August 1855. The other was in course of completion at the time of our visit.

THE WORKS OF THE CHELSEA WATER COMPANY IN 1850,

Described chiefly from the Return of the Company to the General Board of Health at that date.

The Company was incorporated by Act of Parliament 8 Geo. I. c. 26., under the style of the "Governor and Company of Chelsea Water Works."

Further powers were conferred upon them by Royal Charter dated 8th March, 9 Geo. I.; letters patent dated 11th October, 7 Geo. II.; and Act of Parliament 49 Geo. III. c. 157.

Source of Supply.—The water was procured from the Thames by means of a conduit pipe laid across the bed of the river beyond mid-stream, near the Red House, Battersea.

Reservoirs and Filter Beds.—The Company had four subsiding reservoirs, comprising together an area of 3½ acres. They were 15 feet deep, constructed with sloping sides and bottoms, paved with bricks on edge laid on concrete.

The whole of the water was filtered. The filter beds comprised an area of 90,000 superficial feet, and the filtering medium consisted of gravel, shells, and sand, 8 feet thick.

Two open service reservoirs received the filtered water from the Chelsea Works. One in the Green Park comprised an area of 1½ acres, was 10 feet deep, and was constructed with brick walls and paved bottom. One in Hyde Park was ¾ of an acre in extent, and 7 feet deep, constructed with brick walls and concrete bottom.

Engine Power.—The steam engines of the Chelsea Company amounted to 310 horses power. They were situated at Chelsea.

Mains and Branches.—The length of the mains and service pipes was about 134 miles. The large mains were 18, 12, and 10 inches in diameter, the auxiliary mains 7 and 6 inches in diameter, and the services 5, 4, and 3 inches.

Quantity of Water pumped.—The total quantity of water pumped into the mains supplying the district in 1848 was 1,248,115,000 imperial gallons. The average daily quantity per house, including trade and other purposes, was 219 gallons; excluding those purposes, the daily supply per house was 187 gallons.

There were from 200,000 to 300,000 gallons delivered per day to large consumers.

Tenements supplied.—The number of tenements supplied in 1849 was 20,996, and the supply was given daily throughout the district.

The highest service afforded by the Company was 157 feet above high-water mark, and the lowest 4 feet above the same level.

Cost of the Works.—The total expenditure upon the works, including an outlay of 35,000*l.* which was being incurred at the time of the Return, amounted to the sum of 455,712*l.*

ALTERATIONS and ADDITIONS under the following Acts :

The Metropolis Water Act, 15 & 16 Vict. c. 84.
The Chelsea Waterworks Act, 15 & 16 Vict. c. 156.

Source of Supply.—The river Thames at Seething Wells, near Thames Ditton, immediately contiguous to the point whence the Lambeth Company's supply is taken, and about two miles above Teddington Lock.

The filtered water was first supplied from this source to about half the Company's district on the 2d July inst., and it has now been extended to the remainder.

Reservoirs and Filter Beds.—Two new subsiding reservoirs, with slopes of 1 to 1, lined with brick on edge laid on concrete, have been formed at Seething Wells. They comprise an area of 3 acres, and are each capable of containing 10 million gallons of water. Two filter beds adjoin them, which comprise an area of 2 acres, and are each capable of filtering 10 million gallons in 24 hours, at the rate of two gallons per hour per foot.

The filtering medium is eight feet in thickness, and consists of the following layers :—

	ft.	in.
Fine sand	2	9
Coarse sand	0	7
Shells	0	2
Fine gravel	1	6
Coarse gravel	3	0

The several layers are formed undulating, with the view to better drainage and greater facilities of cleansing.

Two covered reservoirs adjoining each other have been constructed on Putney Heath. They are $2\frac{1}{2}$ acres in extent, and hold 20 feet depth of water. These reservoirs command a maximum height of service of 170 feet above Trinity high water. They have sloping sides, paved with brick on edge, laid on concrete. The covering consists of brick arches, springing from 14-inch walls, of similar construction to that of the Lambeth Company's reservoirs at Brixton. A third (open) reservoir adjoins these, which is formed for a supply of unfiltered water for road and street watering, flushing, &c. It is half an acre in extent.

A convenient cottage is in course of erection here for the reservoir keeper.

Engine Power.—The aggregate nominal engine power of the Chelsea Company is now 700 horses. It is comprised in, first, two pair of W. Simpson's double cylinder or compound engines, similar to those of the Lambeth Company; small cylinders 28 inches diameter, large cylinders 46 inches diameter, and 8 feet stroke. The nominal power of these engines is 650 horses. Secondly, two engines with single cylinders 20 inches diameter, and 3 feet stroke. The nominal power of these engines is 50 horses.

The pumps worked by the larger engines are of the united plunger and bucket construction, with buckets 24 inches diameter, plungers $17\frac{1}{2}$ inches diameter, and 7 feet length of stroke. Thirteen boilers have been erected for the supply of these engines.

The pumps worked by the smaller engines are of the same construction, with buckets $11\frac{1}{4}$ inches diameter, plungers 8 inches diameter, and length of stroke 2 feet 7 inches.

The whole of these engines have been erected at Seething Wells, and it is the Company's intention to

pull down and sell the pumping machinery of the old works at Chelsea.

Four double cottages have been erected at Seething Wells for the enginemen and workmen of the Company.

Mains, Branches, &c.—The total length of pipeage is now 198½ miles, the additional length laid since the previous return being 64½ miles. Two mains have been laid complete from Seething Wells to the Putney Heath reservoirs, one of 30 inches diameter, for filtered water, for the supply of the district, and one of 15 inches diameter for unfiltered water, for the supply of the parks, for street watering, &c. At all crossings and difficult places on the line, a second length of 30-inch main has been laid, and sufficient land has been purchased for laying four 30-inch mains. The mains from Putney Heath to the district consist of two of 24 inches diameter, and one of 12 inches.

The plan of the mains and district mains required by the Metropolis Water Act, 1852, is in progress, and it will include all the pipes of the new works recently constructed by the Company. The scale of the plan is 40 inches to the mile.

"*Consumption of Smoke.*"—No apparatus is employed for this purpose. The engines are worked with boilers of double capacity, and air is admitted into the furnaces for a few minutes after the supply of fresh fuel. If this is properly attended to, the arrangement will suffice for a compliance with the provisions of the Metropolis Water Act in this respect.

Quantity of Water supplied.—The average quantity of water pumped daily in 1855 was 5,323,000 gallons, and during the present summer it has reached 6,914,000 gallons per diem. The number of tenements supplied is now 25,030. The supply is furnished to all parts of the district daily.

The area of the district at present supplied by the Chelsea Water Company is coloured yellow on the accompanying plan. The site of the works and the line of mains thence to Putney Heath are also shown in the same colour.

Cost of the Works.—The total expenditure upon the works under the Acts of 1852 has amounted to 472,324*l.*, which sum, added to the previous outlay, makes the total cost of the Chelsea Company's Works 928,036*l.*

General Remarks.

The new works of the Chelsea Company above described are of the most substantial and excellent kind. The buildings are of plain although handsome character; but the engine chimney, in the style of an Italian campanile tower, is more ornate, and forms a striking feature in the landscape.

The river wall, built to an uniform line of considerable length, is constructed of concrete, and forms a handsome terrace.

The Company have acquired a sufficient area of land at Seething Wells for a very great extension of their works, and the buildings have been so designed as to admit of their being doubled or ultimately quadrupled on an uniform plan, when the necessity for such increased arrangements may arise.

The mains from the new reservoirs at Putney Heath to the district are carried over the River Thames by a bridge of wrought-iron plate girders, resting on iron columns upon screw piles. The bridge has nine openings, the centre span being 90 feet, and 20 feet in clear height above Trinity high water. This work occupied only 15 months in construction.

It has been before stated, that the Chelsea Water Company were allowed by the Metropolis Water Act, 1852, until the end of August of the present year for the alteration of their source of supply, but the state of the river within tidal influence, already bad, has become latterly so seriously worse, that the Company were anxious to effect the alterations with all possible speed, and great credit is due for the energetic manner in which the works have been

carried out and the change accomplished before the expiration of the time allowed.

The works at Chelsea are now altogether disused, but the connections have not yet been severed.

THE WORKS OF THE NEW RIVER COMPANY IN 1850,

Described chiefly from the Return of the Company to the General Board of Health at that date.

The Governor and Company of the New River were incorporated 21 June, 17 Jas. I. They have obtained at various subsequent times legislative powers: the Acts being, 3 Jas. I. c. 18.; 4 Jas. I. c. 12.; 4 Geo. II. c. 14. (private Act); 12 Geo. II. c. 32.; 3 Geo. IV. c. 109.

Sources of Supply.—The sources of supply were, the Chadwell spring, near Ware, in Hertfordshire; the river Lea, Spitalbrook; small springs taken into the river in its course; also the water-shed of the North-hall district, and four deep wells sunk into the chalk in Middlesex and Hertfordshire.

The quantity obtained from these sources was as follows:—

From Chadwell springs	-	500	cubic ft. p. minute
„ River Lea -	-	1,340	„ „
„ Amwell well -	-	196	„ „
„ Amwell-hill well	-	285	„ „
„ Cheshunt well	-	50	„ „
„ Hampstead-road well		70	„ „
Total	-	2,441	cubic ft. p. minute

Reservoirs.—There were six reservoirs, situate at the following places:

At Cheshunt two reservoirs, comprising an area of 18 acres 2 roods;

	A.	R.	P.
No. 1 -	11	0	0
No 2 -	7	2	0

At Stoke Newington two reservoirs, of an area of 42 acres 2 roods.

	A.	R.	P.
No. 1 -	22	0	0
No. 2 -	20	2	0

At the New River Head one reservoir, comprising an area of 5 acres.

The sixth and last reservoir, situated in the Hampstead road, was about 200 feet in diameter, built with brick sides.

Filtration.—No description of filter was used. The water generally had a period of seven days for subsidence in the store reservoirs. The Company stated further that, "In the reservoirs at Cheshunt "where the water is taken from the water-shed of the "district north of the same, it was generally retained "*a month*, and in the New River where the current is "gentle, as also at five enlarged portions of the same, "there was much time for the deposit of any alluvial "matter which it may contain."

Engine Power.—The effective engine power possessed by the Company amounted to 720 horses; the amount of steam power exerted during the summer was equal to about 360 horses working 16 hours each day; in the winter it may be taken at 260. The *nominal* engine power of the Company was 442 horses.

Mains, Branches, &c.—The length of pipeage was not given in the return of this Company, the details having never been kept.

Quantity of Water pumped.—The quantity of water delivered in the year 1849 was 18,000,000 gallons per day during the summer drought. In the previous year 918,517 gallons per day (Sundays excepted) were delivered to large consumers. The quantity supplied for all purposes amounted to about 170 gallons per house per day.

Tenements supplied.—The total number of tenements supplied was 83,206; and 444 large consumers; about 230 houses had a constant supply.

The highest service afforded by the Company, was 430 feet above high-water mark, and the lowest five feet above the same datum.

In the principal and more populated part of the Company's district, the supply was furnished daily; in the country district, north of the Regent's Canal, it was given only four days in the week.

Cost of the Works.—The total expenditure upon the works, to the end of the year 1848, was 1,421,717*l.*

Alterations and Additions under the following Acts:

The Metropolis Water Act, 15 & 16 Vict. 84.
The New River Company's Act, 15 & 16 Vict. c. 160.
The New River Company's Act, 17 Vict. c. 39.
The New River Company's Act, 17 Vict. c. 72.

Sources of Supply.—The sources of supply remain unaltered; but considerable change has been effected in the course of the New River. Many of the bends have been cut off and straightened, and the length of the channel has been thereby greatly reduced. An Act has been obtained for the diversion of the Hertford sewerage from above the Company's intake from the River Lea; but nothing has yet been done towards carrying out this improvement.

Reservoirs and Filter beds.— The reservoirs at Stoke Newington and Cheshunt are still used as subsiding reservoirs. Those at Stoke Newington have been cleaned out and deepened, which has added about 40 per cent. to their capacity.

The old reservoir at the New River Head receives the surplus water of the river which passes the Stoke Newington works. The reservoir near the Brecknock Arms is now intended only for the supply of the New Cattle Market; and that at the Hampstead-road for the supply only of the contiguous baths and washhouses.

Filter beds have been constructed, both at Stoke Newington and the New River Head. Those at Stoke Newington, five in number, cover an area of 6½ acres, and space is reserved for two more. Those at the New River Head are three in number, covering an area of 2½ acres. The supply of filtered water to part of the district was commenced at Christmas 1855, and was subsequently extended over the whole district, with few exceptions, for the completion of which further pipeage is required, and will speedily be supplied.

The filtering medium is five feet in thickness, two of which consist of sand, and the rest of gravel in layers increasing in coarseness towards the bottom.

The Claremont-square reservoir, which receives the filtered water from the New River Head, has been covered over in accordance with the provisions of the Metropolis Water Act, 1852. The covering consists of brick arches springing from cross arches on brick piers. This reservoir has an area of 31,000 square feet, and is capable of holding 3½ million gallons.

Two new covered service reservoirs have been constructed at the top of Maiden-lane, 220 feet above high-water mark. The covering of these is of the same description as of that at Claremont-square. The area of each is 56,784 feet. With 22 feet depth of water they are capable of containing 7½ million gallons. They receive the filtered water direct from the Stoke Newington works. The arching of these reservoirs, as well as of that at Claremont-square, is covered with soil. Another covered reservoir for filtered water is situated at Stoke Newington, of different construction to the others. The water, 22 feet in depth, is wholly below the surface level of the ground, and the reservoir is enclosed by brick walls above ground, spanned with an iron roof covered with slates. Its area is 19,440 superficial feet, and it is capable of holding 1¾ million gallons.

Engine-power.—Six new engines have been erected at Stoke Newington of 1,000 nominal horse power. Two pairs are by W. Simpson, and are copies

of those at the Lambeth and Chelsea Works, on the combined high pressure and condensing principle. The high pressure cylinders are 28 inches in diameter, the length of stroke being 5 feet $6\frac{1}{2}$ inches. The low pressure cylinders are 46 inches in diameter, and the length of stroke 8 feet. Each of these engines has one pump 27 inches in diameter, 6 feet 11 inches stroke.

One pair of engines has been supplied by Boulton and Watt. The cylinders are 60 inches in diameter, the length of stroke is 8 feet. Each engine works two pumps, one of $43\frac{1}{11}$ inches diameter, and 4 feet 9 inches stroke, the other of $31\frac{1}{7}$ inches diameter, and 7 feet length of stroke. There are 18 boilers for the supply of the six engines.

"*Consumption of Smoke.*"—No apparatus has been attached to the furnaces for the consumption of smoke; the best "Resolven" Welsh coal only is used.

Mains, branches, &c.—The entire length of pipeage possessed by this Company is not exactly known. No quantity was named in the return of 1850; but it is stated to be now somewhere between 400 and 500 miles.

A plan of the mains and district mains, as required by the Metropolis Water Act, has been laid down on the Ordnance engraved sheets 5 feet to the mile.

Quantity of Water pumped.—The daily quantity of water now pumped for distribution is 25 million gallons. The number of tenements supplied is 95,083.

The supply is given daily, Sundays excepted, to all parts of the district; and where necessary, in the poorer localities, in consequence of insufficient cisternage, on Sundays also.

The area of the district at present supplied by the New River Company is coloured pink on the accompanying plan. The sites of the reservoirs and other works are distinguished by the same colour.

Cost of the Works.—The total sum expended since the passing of the Company's Act, 1852, for new works and extensions, inclusive of purchase of

lands, &c. for further operations, was 566,084*l.* to the end of the year 1855, making with the previous outlay a total expenditure of 1,987,801*l.*

General Remarks.

It will be observed by the above statement that the new works of the New River Company are of a most extensive description. The New River Head is not a very desirable locality for filter beds, but otherwise the works have been carried out in a liberal spirit, and no expense has been spared that could render them substantial and efficient.

The engine buildings at Stoke Newington partake of the character of a Scotch castle, and form a prominent feature in the landscape for a considerable distance.

The large subsiding reservoirs at the same place were formerly equal to 10 days' supply, but, owing to the rapidly increased demand for water, are now only capable of 5 days' storage. When lately cleared out and deepened, only 10 inches of deposit were said to have been found, although the reservoirs have been in use for 20 years. The heavier particles in suspension would, no doubt, have been deposited along the course of the New River and in the other reservoirs before reaching those at Newington; but it would appear to be impracticable to separate the finer matter entirely by rest. As stated in the return, no means of filtration were employed by this Company previous to the Act of 1852.

The filtering medium alone has cost the Company £35,000.

The cost of covering the Claremont-square reservoir was 21,000*l.* The expense was much increased by the necessity of supplying the tenants from the reservoir at the same time that the works were in progress, which required the construction of cross dams.

The pipe from the tank at the New River Head, which formerly supplied the unfiltered water to

the district, it is proposed to retain for the supply of unfiltered water in the same way during periods of frost. The Company's engineer considers that means of supply, independent of the filter beds, should be maintained, because 6 or 7 inches of snow may, in heavy falls, pass through the water on to the surface of the sand, and obstruct the filtering action. From all experience on this subject that has come to our knowledge, we have reason to believe that there would be no possible danger of this if the ordinary depth of water is kept on the filter beds, while it would certainly be more satisfactory that the means of supplying unfiltered water to the district should be removed.

The old engines at the subsiding reservoirs at Newington, for the supply of the Highgate district, will remain as they were, as well as that erected at Highgate for the higher lift.

The extensive works in progress in deepening and improving the channel of the New River, and in cutting off many of its windings, will, as we have said, have the effect of shortening its length very materially We examined its course from the commencement at the Chadwell spring, near Ware, to the reservoirs at Cheshunt, which is as far as the alterations have yet proceeded.

The Chadwell spring, the original source of supply of the New River Company, yields about 500 cubic feet of water per minute; 274 cubic feet are derived from the wells at Great Amwell, and some small additions are obtained from other wells and from tributaries to the New River, but the main source of the Company's supply is now the river Lea, from which 1,840 cubic feet of water per minute are taken, with power reserved to extend the quantity to 2,500 feet. Under these circumstances it does seem important that the drainage of Hertford, which discharges immediately above this source of supply, should be diverted from it, and it is to be hoped that the powers obtained by the Company to effect this object will soon be put in operation.

THE WORKS OF THE EAST LONDON WATER COMPANY IN 1850,

Described chiefly from the return of the Company to the General Board of Health at that date.

The several Acts obtained by the East London Water Company bear date as follows:—47 Geo. III. cap. 72.; 48 Geo. III. cap. 8.; 10 Geo. IV. cap. 117.

Sources of supply.—The river Lea, *i.e.* about 87 per cent. of the water supplied by this Company, was brought to Old Ford from the river Lea (at Lea-bridge), upwards of six miles from its mouth, by an open canal, nearly two miles in length; about 12 per cent. was taken into the reservoir near Lea-bridge; and about one per cent. was taken from a branch of the Lea, called the water-works stream.

Reservoirs.—This Company had six open reservoirs, their capacity, including the canal, was about equal to 35,000,000 gallons. They were situated as follows:

Two at Old Ford,
Two on the eastern side of the river Lea,
One at Lea-bridge,
And one at Stamford-hill.

These reservoirs, for the most part, were lined with Kentish rag-stone.

Filtration.—The water was not filtered. It was received into two large reservoirs of deposit, previously to flowing into smaller reservoirs, whence it was pumped into the district supplied by the Company.

Engine-power.—The total nominal engine-power was 516·8 horses by steam, 34·5 do. by water-wheels.

The total number of steam engines was five, as follows:

No. 1. engine,	cylinder 90 in. diameter, stroke 10 ft.	
	pumps - 44 in. diameter, stroke 11 ft.	
No. 2.	„	cylinder 80 in. diameter, stroke 10 ft.
	pumps - 41 in. diameter, stroke 9 ft.	

No. 3. engine,	cylinder	60	in. diameter, stroke 8 ft.
	pumps -	27	in. diameter, stroke 8 ft.
No. 4. „	cylinder	60	in. diameter, stroke 8 ft.
	pumps -	27	in. diameter, stroke 8 ft.
No. 5. „	cylinder	36	in. diameter, stroke 8 ft.
	pumps -	$17\frac{3}{4}$	in. diameter, stroke 8 ft.

The water power possessed by the Company consisted of—

The Lea-bridge water-wheel, with two pumps, one having $20\frac{1}{2}$ inches diameter, stroke seven feet, and the other 11 inches diameter, stroke three feet.

The Stratford water-wheel, with two pumps, one having 11 inches diameter, stroke three feet, and the other nine inches diameter, stroke three feet.

Mains, Branches, &c.—The total length of mains was stated to be at least 88 miles, the sizes varying in diameter from 42 inches to five inches. These were always charged with water, under pressure. There were besides, 140 miles of service pipes of 4 and 3 inches diameter, making a total length of pipeage of 228 miles.

Quantity of Water pumped.—The quantity of water delivered in the year ending Christmas 1849 was 3,222,753,876 gallons. This was a somewhat smaller supply than was pumped in the previous year, the decrease having been due, it was considered, to the introduction of the system of daily instead of alternate supply, and the saving of waste consequent thereon. The average supply to each house, exclusive of large consumers, watering roads, &c., was, for seven days per week, 140 gallons per diem.

Tenements supplied.—The total number of private houses supplied was 56,673, and 264 large consumers.

The highest service afforded was about 120 feet above high-water mark, and the lowest about three feet above the same level.

The supply was given six days in the week, or oftener if required, throughout the Company's district.

Cost of works.—The total expenditure upon the works up to Midsummer 1849 amounted to 745,781*l.*

ALTERATIONS and ADDITIONS under the following Acts:

Metropolis Water Act, 15 & 16 Vict. c. 84.
East London Waterworks Act, 15 Vict. c. 7.
East London Waterworks Act, (No. 2.) 15 & 16 Vict. c. 164.
East London Waterworks Act, 16 & 17 Vict. c. 166.
East London Waterworks Act, 17 Vict. c. 65.

Source of supply.—The river Lea, above Tottenham. For the conveyance of the water from Tottenham to Lea Bridge, a new open channel has been cut of 100 square feet sectional area. From above this new intake, a large and expensive intercepting drain has been executed, four and a half miles in length, which cuts off from the river the refuse of dye-works, and the drainage of neighbouring places, which are stated to have a population of about 35,000 inhabitants, so that the water is now obtained of the same purity as above Chingford Mills.

Filter beds, Reservoirs, &c.—At Lea Bridge the water is received direct from the river on to 13 new filter beds, which cover an area of 12 acres. These have been constructed in two circles, each with a pure-water well in the centre. There are seven filter beds arranged in one circle and six in the other. The filtering medium is three feet six inches in thickness, composed entirely of sand.

From the filter beds the main body of water is conveyed by a four-feet iron pipe to the two oval reservoirs at Old Ford, which were formerly subsiding reservoirs. They have now been connected and covered with brick arches, springing from cross arches resting on piers, the surface of the arches being covered with soil. These reservoirs are 2½ acres in extent.

The other reservoirs of the Company near Old Ford and that at Stamford Hill are now thrown out of use.

Engine-power.—In addition to the engine-power described in the former return, a new engine, with 100-inch cylinder and 11-feet stroke, has been erected at Lea Bridge for the supply of the upper northern district. There are six boilers to this engine. It is

capable of lifting 150 cubic feet of water each stroke. A new Cornish engine, 70-inch cylinder, is also in course of erection at Old Ford. The aggregate nominal engine power of the Company is now 840 horses, equal to 40 million gallons of water per day lifted 100 feet high.

"*Consumption of smoke.*" — Some apparatus has been employed at Old Ford for the prevention of dense smoke from the furnaces, but "smokeless" fuel is now used.

Quantity of water pumped. — The quantity of water now pumped is 16 million gallons per day, and the number of tenements supplied is 70,000. The supply is furnished six days per week.

Mains, Branches, &c.—The total length of pipeage laid, up to Christmas 1855, was 331 miles.

The plan of the Company's mains and district mains, required by the Metropolis Water Act, 1852, is complete up to Christmas last. It is drawn to the scale of 12 inches to the mile.

The area of the district supplied by the Company and the sites of the works are coloured purple on the accompanying plan.

Cost of the works.—The cost of the new works executed since the Acts of 1852, has been 250,000*l.*, making, with the previous outlay, a total expenditure of 995,781*l.* upon the works of this Company.

General Remarks.

The new works of the East London Water Company most worthy of note, are the 100-inch cylinder engine, the filtering arrangements at Lea Bridge, and the intercepting drainage.

This engine at Lea Bridge is said to be the largest yet erected for waterworks, although it will be seen that the Southwark and Vauxhall Company have one of still larger dimensions now in course of construction.

The filter beds are the most extensive works of the kind appertaining to the metropolitan supply, and they are admirably arranged. They were commenced

in 1852; the first half was completed in June 1854; and the whole by the 5th November 1855, when filtered water only was delivered to the Company's district.

The water of the Lea was quite as turbid as that of the Thames at the time of our visit, owing to the recent rains; but, although the filtering medium employed by this Company is of less thickness than that of any other, the filtered water certainly appeared to us to be the brightest.

The East London Water Company, as stated in the return, employed no means of filtration before the Act of 1852. The large depositing reservoirs upon which they had to rely for clearness of the water have now been abandoned, and all communication between them and the mains has been cut off. The cocks are now used in the main which brings the filtered water from Lea Bridge to the covered reservoirs at Old Ford.

This Company has no high-service reservoir for the supply of their tenants; the water is pumped direct into the district for distribution.

The new buildings at Lea Bridge are of brick; they are substantial, and of handsome elevation. The chimney, and stand-pipe for the supply of the northern high-level district, are enclosed in a square tower 148 feet in height. Fifty-two inch cocks are fixed between the pump and stand-pipe, and between the stand-pipe and main.

No expense has been spared in making these works as complete as possible.

THE WORKS OF THE KENT WATER COMPANY IN 1850,

Described chiefly from the Return of the Company to the General Board of Health at that date.

The Acts under which the powers of the Kent Company have been obtained are, 49 Geo. III. c. 189., 51 Geo. III. c. 145.

Source of Supply.—The water supplied by this Company was, and is still, taken from the river Ravensbourne, at Deptford.

Reservoirs.—The total capacity of the Company's reservoirs and filter beds amounted to 8,710,754 gallons. Two of these were impounding reservoirs situated at Deptford; the water was conveyed from them to two filter beds, and then pumped to the service reservoirs in Greenwich Park, on Woolwich Common, and near the Marine Barracks at Woolwich. From these reservoirs fire mains were also laid to command the Government establishments at Deptford, Greenwich, and Woolwich.

Filtration.—The sand surface of the two filters employed by the Company was $1\frac{1}{4}$ acres. Upon these the water was admitted and passed through direct to the engine pumps, all the water supplied having been filtered.

The filtering medium was clean washed gravel at the bottom, with a layer of shells on the gravel, and sand on the shells.

Engine power.—The steam-engines employed consisted of two Bolton and Watt engines, 38 inch cylinders, 8 feet stroke. Pumps, $14\frac{1}{2}$ inches diameter, 6 feet 3 inches stroke; and

One Cornish engine, 70-inch cylinder, 10-feet stroke. Pumps, double acting, $20\frac{1}{2}$ inches diameter, 10 feet stroke.

Mains, Branches, &c.—The total length of mains, branch mains, side services, and services for small streets, was 85 miles, 3 furlongs, and 165 yards, the sizes varying from 24 inches to $1\frac{1}{2}$ inches in diameter.

Quantity of Water pumped.—The total quantity of water pumped during the year 1849 was 393,948,750 gallons. The average supply to each dwelling house, reckoning seven days per week, was nearly 92 gallons per diem.

Tenements supplied.—The number of tenements supplied was 9,632, and thirteen large consumers, The supply was given six days a week to private consumers, and to the Government establishment at Woolwich and to the railways, seven days a week.

The highest service afforded by the Company, was 220 feet above high-water mark, and the lowest at high-water mark.

Cost of the Works.—The total expenditure upon the works was not stated, as the Company's books do not contain any account showing this result, but the capital raised amounted to 202,104*l.* 13*s.* 6*d.* The cost of the works was said to have exceeded this sum, as for many years a large proportion of the earnings was laid out in purchase of pipes and other works, properly chargeable to capital.

Alterations and Additions under the following Act: (13 & 14 Vict. c. 59.)

No new works have been executed by this Company under the Metropolis Water Act, 1852, but an Act was obtained in 1850, which empowered the Company to raise a further sum of one hundred thousand pounds, certain new works have been executed and alterations made since the return to the General Board of Health in 1850.

Filter Beds, Reservoirs, &c.—One new filter bed has been added at Deptford, making a total surface for filtration of 12,820 square yards. The filtering medium consists of two feet of gravel, six inches of shells, and two feet of sand. The subsiding reservoirs at Deptford, described in the former return, comprise an area of 25,157 square yards, and are capable of holding 1,358,298 cubic feet of water.

The service reservoir in Greenwich Park covers an area of 3,122 square yards, and contains 168,370 cubic feet of water. That on Woolwich Common covers an area of 4,378 square yards, and contains 277,890 cubic feet of water.

Engine-power.—One new Cornish engine has been erected at Deptford, 70-inch cylinder, 10-feet stroke. Double acting pump, 18 inches diameter. It is contained in the same building as the similar engine before described. The aggregate nominal engine power of the Company is now 500 horses.

"*Consumption of Smoke.*"—No apparatus for consumption of smoke is employed. Welsh coal is always used, and no dense smoke is formed.

Quantity of Water pumped.—The quantity of water pumped in 1855 was 862,760,566 gallons. The number of tenements to which the supply is now furnished is 16,077.

For the high service the water is now raised to a maximum height of 300 feet, and for the low service, 170 feet. The works for the high and low service are quite distinct.

The maximum daily supply to the district in 1855 was $3\frac{1}{2}$ million gallons.

The supply is either constant or is given daily to all parts of the district.

Mains, Branches &c.—The total length of pipeage now laid down is stated to be 124 miles. A plan of the mains and district mains, as required by the Metropolis Water Act, is in a forward state, laid down on the Ordnance engraved outline sheets, five feet to the mile, but it is not yet complete.

The area of the district supplied by the Kent Water Company, and the positions of the works and reservoirs, are coloured yellow on the accompanying plan.

Cost of the Works.—The cost of the new works executed since 1852 has been 27,022*l.*, and taking the amount before given as the cost of the previous works, the total expenditure has amounted to 229,126*l.* 13*s.* 6*d.*

General Remarks.

The new works executed by the Kent Water Company since the previous return, call for no particular observation, except that they have been well carried out, and that the engines and buildings are a model of cleanliness and order.

No stand-pipe is used, but a larger air vessel than usual is connected with the main, it being six feet in diameter, and 30 feet high.

With double action pumps, the water being always in motion, no risk is incurred in pumping directly into the mains, either for supply, or for delivery into the high-level reservoirs.

The service reservoirs for the filtered water remain open as before, being situated beyond the limits prescribed by the Act of 1852; but, it should be added that they are chiefly of use as reserves in case of fire, a separate fire-main being carried from each to the Government buildings. The supply to the district is given for the most part direct from the mains, independently of the reservoirs. The lower reservoir, however, near the Marine Barracks at Woolwich, being in an objectionable locality, is now abandoned and disconnected from the works.

THE WORKS OF THE HAMPSTEAD WATER COMPANY IN 1850,

Described chiefly from the Return of the Company to the General Board of Health at that date.

The Hampstead Water Company's Act dates the 35th Henry VIII. c. 10.

Sources of supply.—The sources of supply were described in the return of 1850 as "springs at Hampstead and Ken Wood, two artesian wells, and temporarily the New River." The wells were situated respectively at Hampstead and Kentish Town.

Reservoirs.—The total superficial area of water in the reservoirs, when full, was stated to be about 35 acres; the depths of the reservoirs were said to vary considerably, and the bottoms to be so irregular that no estimate has ever been made of their total capacity that could be depended on.

Filtration.—The water was not filtered.

Engine-power.—The two steam engines amounted to about 72 horses-power nominally. They consisted of a Cornish engine, at Kentish Town, 60-horse

power, 44-inch cylinder, 10-feet stroke; and a high pressure non-condensing engine at Hampstead, of 12-horse power, cylinder 12 inches, 3 feet stroke.

Mains, Branches, &c.—The total length of the mains, branch mains, side services, and services for small streets, amounted to about 26 miles, 1 furlong, 131 yards, and varied in size from 12 inches to 3 inches internal diameter.

Quantity of Water pumped.—The quantity of water pumped during *six months* ending 1st December, 1849, including a temporary supply from the New River Company, was 78,013,000 gallons. The estimated quantity delivered to each house for domestic supply was 86 gallons per diem.

The supply was given *three* days a week throughout the district.

Tenements supplied.—The total number of houses supplied during the year 1849 was 4,490, empty houses inclusive; one large consumer of 500 gallons per diem, for 6 days a week, and two ditto 1,500 gallons per diem, for 6 days a week.

The highest service afforded by the Company, was about 215 feet above high-water mark, and the lowest 60 feet above that level.

Cost of the works.—The total capital invested in the works of this Company, as they existed in 1850, was estimated to be £81,231.

Alterations and Additions under the following Act:

The Metropolis Water Act, 15 & 16 Vict. c. 84.

Source of supply.—There is no fresh source of supply for this Company. The artesian well at Kentish-town, from which part of the supply was formerly obtained, has since been continued to a depth of 1,302 feet from the surface by a bore hole commencing with 12 inches diameter, and reduced

first to 10 and then to 8 inches. After passing through the chalk in full expectation of obtaining water from the sands supposed to lie beneath it, a stratum of what is considered to be the New Red Sandstone has been penetrated without tapping the springs.

Reservoirs and Filter Beds.—The reservoirs remain as before. One small filter bed, comprising an area of 6,309 square feet, divided in the middle for cleansing purposes, has been constructed within the reservoir at Kentish-town, to filter the water obtained from the Hampstead and Highgate ponds. The filtering medium is 3 ft. 3 in. in depth, and is composed of the following layers:

1 ft. 0 in. large washed pebbles.
0 „ 6 „ small washed pebbles.
0 „ 6 „ fine shingle and gravel.
1 „ 3 „ sand.

The filtered water was first supplied at Christmas, 1855.

"*Consumption of Smoke.*"—No apparatus has been adopted for this purpose. Welsh coal is used for firing.

Mains, Branches, &c.—The total length of pipeage now laid extends to about 33½ miles.

The mains of this Company have been subject to such frequent alterations for the purpose of making connections at different points with the pipes of the New River and West Middlesex Companies, to meet the constantly increasing requirements, that it is said to have been impossible to prepare a satisfactory plan of the underground works as required by the Metropolis Water Act.

Quantity of Water pumped.—There appear to be no data for determining the gross quantity latterly supplied per day to the tenants of this Company, as the charge for the supply in aid by the New River and West Middlesex Companies, has been founded on the amount of the water rents of the houses supplied, and not on the quantity. Assuming, however, the same

average quantity per house as in the former return, the gross daily supply would amount to 603,060 gallons, the number of houses supplied being 6,348.

The area of the district supplied by this Company, and the sites of the reservoirs and works, are coloured brown on the accompanying plan.

Cost of the Works.—The cost of the additional works executed by this Company since the former return, has been 33,224*l.* 5*s.* 3*d.*, making with the previous outlay a total expenditure of 114,455*l.* 5*s.* 3*d.*

General Remarks.

The only new work of this Company strictly consequent upon the Act of 1852, is the small filtering apparatus above described.

The new boring at Kentish Town was commenced in June, 1853, from the bottom of the old well, which had been sunk 540 feet deep. The work was abandoned at the end of 1855, under the circumstances above stated, a depth of 1,302 feet having been obtained, and an expenditure of 7,500*l.* having been incurred.

The result of the undertaking was most unexpected. Considerable discussion has arisen among geologists as to the nature of the strata which have been met with, and much interest attaches to the subject. We are enabled by the courtesy of the engineer to append an entire section of the strata. It would be of importance to the cause of science if any means could be found for the continuance of the work.

A very small district is now supplied by this Company. Supplies of water have been obtained in aid for some time from the New River Company; and before the filter bed was ready, the water was also obtained for the supply of part of the district from the West Middlesex Company.

The water from the well at Hampstead, from which about 70 gallons per minute are raised, we found to be clear and bright, and of better colour than the filtered reservoir water.

The means of supply of the Hampstead Company, owing to the sacrifice of their previous well, and the failure and abandonment of the new one, are now less than before. It is understood that terms have been agreed, whereby the affairs of the Company will be merged in those of the New River; and the Hampstead Water Company, which originated in the time of Henry VIII., will then cease to exist.

Section of the Boring at Kentish Town.

			ft.	in.	Depth ft.	Depth in.
Tertiary Strata, 324 ft. 6 in.	*London Clay* (236 ft.).	1. Yellow clay	30	6		
		2. Blue clay, with *Septaria*	205	6		
	Woolwich and Reading Series (61 ft. 6 in.).	3. Mottled (red, yellow, and blue) clay	37	6		
		4. White sand, with flint-pebbles	0	6		
		5. Black sands; *passing into*	2	0		
		6. Mottled green and red clay	1	0		
		7. Clayey sands	3	0		
		8. Dark-grey sands with seams of clay	9	6		
		9. Quick-sands, ash-colrd.	6	6		
		10. Flint-pebbles	1	6		
	Thanet Sands (27 ft.).	11. Ash-coloured sands	10	0		
		12. Argillaceous sands	4	0		
		13. Dark-grey clayey sands	11	0		
		14. Bed of angular green-coated flints	2	0	324	6
Chalk, 586 feet.	*Middle Chalk with flints* (244 ft. 6 in.).	15. Chalk with flints	119	6		
		16. Hard chalk without flints	8	0		
		17. Chalk, less hard with few flints	31	6		
		18. Nodular chalk, with three beds of tabular flints	13	6		
		19. Chalk, with seams of tabular flint and a few nodular flints	32	6		
		20. Chalk, with a few flints and some patches of sand	9	6		
		21. Very light-grey chalk, with a few flints	30	0		

			ft.	in.	Depth. ft.	in.
Chalk, 586 feet.	*Lower Chalk without flints* (294 ft.).	22. Light-grey chalk, with a few thin beds of chalk-marl subordinate	133	0		
		23. Grey chalk-marl, with compact and marly beds and occasional pyrites	161	0		
	Chalk-marl (47 ft. 6 in.).	24. Grey marl	20	0		
		25. Harder grey marl, rather sandy and with occasional iron-pyrites	27	0		
		26. Hard rocky marl	0	6—	910	6
	Upper Greensand (72 ft. 6 in.).	27. Bluish-grey marl, rather sandy; the lower part more argillaceous	58	9		
		28. Dark-green sand, mixed with grey clay	13	9—	983	0
	Gault (130 ft. 6 in.).	29. Bluish-grey micaceous clay, slightly sandy	39	0		
		30. Ditto, with two seams of argillaceous green-sand	6	7		
		31. Micaceous blue clay	84	11—	1113	6
188 ft. 6 in.		32. Red and yellow sands, and sandstone	1	0		
		33. Compact red clay, with patches of variegated sandstone	4	0		
		34. Pure dark red clay	4	7		
		35. Red clay, whitish sands, and mottled sandstone	3	0		
		36. Hard red conglomerate, with pebbles of syenite, greenstone, trap-rock, quartz, hornstone, red claystone-porphyry, and fossiliferous schist, well rounded, and varying in size from a marble to a cannon ball	2	0		
		37. Micaceous red clays, mottled in places	26	0		
		38. Seams of white fissile sandstone and red sand	3	8		
		39. Mottled sandstone	0	4		
		40. Red sand and sandstone with small pebbles and *Belemnites*, and a few small phosphatic nodules	2	0		
		41. Seams of red sandstone and white sands	4	0		
		42. Pebbly red sands, and fissile sandstone	1	0		
		43. White and red sandstone	5	0		
		44. Fine light-red sands	2	9		
		45. Hard fissile sandstone	0	3		

		ft.	in.	Depth. ft. in.
188 ft. 6 in.	46. Very fine light-red sand	4	0	
	47. Pure red clay	2	0	
	48. Red and mottled clayey sands, with some iron-pyrites	1	3	
	49. Red sandy micaceous clay with fissile sandstone	2	5	
	50. Compact hard greenish sandstone	10	0	
	51. Very micaceous red clay	1	0	
	52. Grey and red clayey sands	1	1	
	53. Light-coloured soft sandstone with fragments of *Ammonites*	2	1	
	54. Red sand and sandstone (highly inclined ?)	6	2	
	55. Greenish sandstone	4	0	
	56. White and grey clayey sands, with iron-pyrites	2	0	
	57. Reddish argillaceous sands, with seams of sandstone	3	8	
	58. Micaceous red clay	18	4	
	59. Seam of greenish sandstone	0	5	
	60. Red mottled and micaceous clay, with patches of light-coloured sand and fragments of *Ammonites* and of a *Scaphite*	14	6	
	61. Red compact micaceous clay, with *Belemnites*	20	0	
	62. Red quartzose and micaceous sandstone	2	0	
	63. Brownish-red clayey sand and sandstone	4	0	
	64. Very hard micaceous sandstone, with small pebbles of white quartz	4	0	
	65. Light red argillaceous sand	10	0	
	66. Red sandstone, micaceous and quartzose	8	0	
	67. Light red clayey sands (with small angular fragments of chert or flint ?)	2	0	
	68. Whitish and greenish hard sandstone (horizontal ?)	6	0	
				—1302 0

THE WORKS OF THE PLUMSTEAD, WOOLWICH, AND CHARLTON CONSUMERS' PURE WATER COMPANY.

This Company is not incorporated by a special Act of Parliament; but was fully registered on the 14th October 1852, under the Act 7 & 8 Vict. c. 110.

The works were established for the supply of water to the above-named parishes in 1854, and they have now been in actual operation about two years.

They are in competition with the Kent Water Company over a considerable portion of the district supplied.

Source of supply.—This new Company's supply is derived from a well and deep boring in the chalk, the water from which, when first raised, has always an equal temperature of about 52 degrees Fahrenheit; but the special advantage afforded to the tenants of the Company is that the water is softened by Dr. Clark's process. When first pumped from the well this water has 21½ degrees of hardness, that is to say 21½ grains of hardening matter in the gallon, 14½ of which are derived from carbonate of lime held in solution by an excess of carbonic acid gas. The softening process precipitates 13 grains of this carbonate of lime, and leaves a clear bright water of only 8¼ degrees of hardness.

A short description of the softening process, extracted from Dr. Clark's paper read before the Society of Arts, and also an account of the mode of its application to these works by Mr. Homersham, the engineer, under whom the process has been very successfully carried out, will be found prefixed to our separate observations on this subject further on.

Reservoirs.—The water, with the lime added, is raised into three open reservoirs of a collective area of 8,549 superficial feet, each reservoir being capable of holding 200,000 gallons. They are constructed of concrete walls lined with brick, and the whole are inclosed within a boundary brick wall. These reservoirs are alternately filled and left to settle. When the precipitation is complete, for which not less than 24 hours should be allowed, the clear softened water is raised into covered service reservoirs, whence it is distributed throughout the district.

One of these service reservoirs is situated near Plumstead Common, and commands a service of 157 feet above Trinity high water mark. It covers an area of 10,121 square feet, and will hold 12 feet depth of water. It is constructed in two divisions, and is

covered with brick arches resting on girders and columns.

The other service reservoir is situated on the side of Shooter's Hill, and commands a level of 311 feet above Trinity high water mark. It is 3,918 superficial feet in area, and 13 feet 3 inches deep. The supply is not yet furnished from this upper reservoir.

Filtration.—The water is not filtered, this operation being wholly unnecessary. The water comes from the well perfectly bright; and no difference in this respect can be detected after it has undergone the softening process. This process, however, possesses the further great advantage of preventing subsequent vegetation, from which the supply would otherwise suffer deterioration, if kept in open reservoirs.

Engine Power.—The amount of steam power at present employed by the Company is nominally 35 horses; but the engine is said to be capable of working up to 60 indicated horses. It is a double-acting condensing engine, cylinder 29 inches diameter, stroke 5 feet. It performs 30 double strokes or revolutions per minute. Steam is used at a pressure of 30 lbs. on the square inch above the atmosphere. The engine house is constructed for the erection of a duplicate engine.

"*Consumption of Smoke.*"—No apparatus is employed for this purpose. The boiler is large; there are two fire-places; and alternate stoking, combined with care, are the means relied upon for the prevention of smoke.

Mains, Branches, &c.—The total length of pipeage already laid by the Company is about 16 miles, the mains and services varying in size from 16 inches to 2 inches in diameter.

A plan of the mains and district mains, as required by the Metropolis Water Act, 1852, does not appear to have been yet completed. A plan exists at the office, to a scale of 12 inches to the mile, showing the pipes as they were originally proposed to be laid

down, but the alterations have not yet been inserted.

Quantity of Water pumped.—The quantity of water pumped for many weeks in succession has been 550,000 gallons per day for seven days in the week, but the average quantity cannot yet be stated.

The supply is given to 3,000 houses, so that 183 gallons are furnished per house per day for all purposes.

The supply is given daily, or twice a day, if required, but except in a very few instances, it is not now constant. In the commencement of their operations the Company furnished a constant supply, but the house apparatus and arrangements over which they had no control, are said to have been defective, and to have caused such excessive waste as to compel the Company to abandon the system. The engineer apprehends no great difficulty in the constant supply, if proper apparatus is used, and the connections are carefully made to a proper system.

The area of the district at present supplied by this Company, and the sites of the works and reservoirs, are coloured brown on the accompanying plan.

Cost of the Works.—The total expenditure upon the works of this Company has been about 50,000*l.*, of which 3,700*l.* has been the cost incurred in the adoption of the softening process.

General Remarks.

As we have thought it desirable to enter upon the separate consideration of Dr. Clark's softening process as a general question, we have little to observe upon these works, except that they have been well carried out, and that considering that this is the first attempt at the complete and permanent application of that process to waterworks for domestic supply, the arrangements appear to be of a very matured and satisfactory character. They have completely settled the question of the practicability and easy working of the process, and of the great advantages of its adoption in all similar cases.

Owing to the great demand upon the works, there is reason to fear that it has not always been practicable to allow sufficient length of time for the complete precipitation of the chalk, and that the water has, at times, been delivered to the customers in a somewhat turbid state. A certain amount of deposit in the service reservoir also rather favours this conclusion; but this is a defect which is remediable at any time by extension of the works.

The water has been raised to the service reservoirs after 16 hours rest, but this would not appear to be sufficient time for complete precipitation of the chalk. Twenty-four hours should be allowed.

It would be an improvement if there were four reservoirs for precipitation, and if they were covered. In the construction of the settling reservoirs already formed, the engineer has provided for arching them over at any time.

One ton of the burnt lime added to the water is said to produce 3½ tons of precipitate. The Company have not yet tried the commercial value of this material.

DR. CLARK'S PROCESS FOR SOFTENING WATERS.

Before offering any observations on the applicability of this process to the water supply of the metropolis, under present circumstances, we think it may be useful to give an explanation of what the process is, in Dr. Clark's own words, which we have extracted from the paper read at a meeting of the Society of Arts on the 14th May last, "On means available to the metropolis and other places for the supply of water free from hardness and from organic impurity."

Dr. Clark observes:—

"In order to explain how the invention operates, it will be necessary to glance at the chemical composition and some of the chemical properties of chalk; for while chalk makes up the great bulk of the matter to be separated, chalk also contains the ingredient that brings about the

separation. The invention is a chemical one for expelling chalk by chalk.

"Chalk then consists, for every 1 lb. of 16 oz., of

Lime - - - - -	9 oz.
Carbonic acid - - -	7 oz.

"The 9 oz. of lime may be obtained apart, by burning the chalk, as in a lime kiln. The 9 oz. of burnt lime may be dissolved in any quantity of water, not less than 40 gallons. The solution would be called lime water. During the burning of the chalk to convert it into lime, the 7 oz. of carbonic acid are driven off. This acid, when uncombined, is naturally volatile and mild; it is the same substance that forms what has been called soda water, when dissolved in water under pressure.

"Now so very sparingly soluble in water is chalk by itself, that probably upwards of 5,000 gallons would be necessary to dissolve 1 lb. of 16 oz.; but by combining 1 lb. of chalk in water with 7 oz. additional of carbonic acid (that is to say, as much more carbonic acid as the chalk itself contains), the chalk becomes readily soluble in water, and when so dissolved is called bicarbonate of lime. If the quantity of water containing the 1 lb. of chalk with 7 oz. additional of carbonic acid were 400 gallons, the solution would be a water of the same hardness as well water from the chalk strata, and not sensibly different in other respects.

"Thus it appears that 1 lb. of chalk, scarcely soluble at all in water, may be rendered soluble in it by either of two distinct chemical changes—soluble by being deprived entirely of its carbonic acid, when it was capable of changing water into lime water, and soluble by combining with a second dose of carbonic acid, making up bicarbonate of lime.

"Now if a solution of the 9 oz. of burnt lime, forming lime water, and another solution of the 1 lb. of chalk and the 7 oz. of carbonic acid, forming bicarbonate of lime, be mixed together, they will so act upon each other as to restore the 2 lb. of chalk, which will, after the mixture, subside, leaving a bright water above. This water will be free from bicarbonate of lime, free from burnt lime, and free from chalk, except a very little which we keep out of account at present for the sake of simplicity in this explanation. The following table will show what occurs when this mutual action takes place:—

Agents.			Products.	
Bicarbonate of lime in 400 gallons -	Chalk - -	16 oz.	= 16 oz. of chalk.	=2 lb.
	with			
	Carbonic acid	7 oz.		
Burnt lime in 40 gallons of lime water - - - -		9 oz.	= 16 oz. of chalk.	

"But, instead of the whole chalk being separable by the process from the water, only 10-11ths would be separated; so that, with regard to chalk, the accurate result would be expressed, if we suppose 440 gallons of similar water to be operated upon, containing $17\frac{1}{2}$ oz. of chalk. There would be separated, 16 oz.;—there would remain in solution, $1\frac{1}{2}$ oz. Or, to express the result with reference to a single gallon, each gallon would contain of chalk, if unsoftened, $17\frac{1}{2}$ grains; if softened, $1\frac{1}{2}$ grains; and would deposit 16 grains.

"Here is a convenient place to explain a mode of expressing hardness, in very general use now, but first invented by me, in connection with certain new chemical tests of water, in order to work out conveniently the softening process that has been described.

"*Each degree of hardness is as much hardness as a grain of chalk, or the lime, or the calcium, in a grain of chalk, would produce in a gallon of water, by whatever means it may be dissolved.*

"Thus, our supposed water would be $17\frac{1}{2}$ degrees of hardness before softening; $1\frac{1}{2}$ degrees after softening. And this would be the real result, supposing there were in the water no other hardening matter but chalk; but in the best quality of chalk water from springs or wells in the chalk strata around the metropolis, there is actually present a small proportion of other hardening matter, such as to prevent the water from being softened lower than $2\frac{1}{2}$ degrees. A gallon of such water, after being evaporated, was found to have held in solution of solid matter—

	Grains.
Before softening - -	23
After - - - -	7
The difference - -	16

was due to chalk removed by the softening process.

"These explanations will make it easy to comprehend the successive parts of the softening process."

It will be gathered from our description of the Plumstead, Woolwich, and Charlton Waterworks that this scientific and ingenious process no longer remains in the position of a beautiful theory of the laboratory, of which the practical application is doubtful, it having now been in operation for two years on so large a scale with eminent success and advantage.

We shall now give Mr. Homersham's account, extracted from the proceedings of the meeting before referred to, of the mode in which the process is there applied.

Mr. Homersham states,—

"The manner of carrying out the softening process at the works was as follows:—The lime used was flare lime, made from the upper chalk. Such lime, fresh burnt, was gradually slacked in small quantities in a tub with water, and was passed through a fine sieve, of about 10 meshes to the inch, into a cast-iron cistern. The cistern, which held about a day's supply when full, remained undisturbed for twelve hours, when a quantity of clear water, found to stand above the lime paste, was drawn off, and the lime paste or cream of lime, as it was called, was stirred up to make it all of a uniform consistency, when it was ready for use. A quart of such cream of lime contained in weight about 1 lb., or rather more, of dry unslacked lime. As the water (about 900 gallons a minute) was pumped up from the well, a suitable quantity of this cream of lime was passed, by means of a large cylinder and piston moved by the steam-engine, into the pipe through which the water was conducted from the well. The cream of lime and water were intimately mixed by causing them to pass together through two, what were called, agitators, placed at a little distance apart. Between the two agitators, a well, six feet internal diameter, and open at the top, was interposed, so that all the lime and water, after it had passed through the first agitator, went into this well on one side, and passed out of it again on the other side, to the second agitator, on its way to the depositing reservoirs. The object of this well, which was five feet deep below the entering pipe, was to allow any gritty matter that by accident might be introduced with the lime into the water to fall to the bottom, and so prevent its passing into the depositing reservoirs. The agitator merely consisted of an enlarged pipe, 21 in. internal diameter, and about 6 ft. in length, containing within and around it 3 plates of wrought iron, about 2 ft. apart, having in them about 110 holes, each one inch in diameter. As the lime and water passed together through the holes at a speed of about 50 inches a second, they impinged quickly against the water in the body of the pipe, which moved only at the rate of 12 inches a second. The lime and water in this way became intimately mixed, and passed on together into a reservoir prepared to receive them, capable of containing (after leaving

room for the chalk deposit at the bottom) 600,000 gallons, or one day's supply. The reservoir was divided into three compartments, each capable of holding 200,000 gallons, for convenience in emptying and filling. When the reservoir was being filled, the lime, at the commencement of filling, was added in excess to the water, so much so, that when the reservoir was only three-fourths full, the remaining fourth part was filled up with pure water from the well. In practice, the adjustment of the exact proportions of lime and water was very easy; the silver test was used for the final adjustment of each compartment of the reservoir, as described in Dr. Clark's paper. The reservoir being thus filled with lime and water, and adjusted by the silver test, in about 16 hours afterwards all the chalk or carbonate of lime had fallen to the bottom, the water had become perfectly clear, and it was then pumped up to the service reservoir for the supply of the consumers. When the reservoir was emptied of the softened water down to within about two feet of the bottom (so as not to disturb the deposit), it was again filled with lime and water as before, the deposit not being taken out until it was 17 or 18 inches deep; this did not occur more than once in eight or ten weeks. The pipe through which the water passed from the well, after the cream of lime was mixed with it, to the depositing reservoirs, was a closed cast-iron pipe, 14 inches in diameter, and about 75 yards in length. It was found for this length, at Plumstead, that the pipe got very slowly coated with a deposit of furr or crystallised carbonate of lime. The same kind of furring or deposit of chalk also took place in the agitators, but by making proper provision for clearing out the deposit which adhered to those parts, they could very easily be kept clear."

As the operation is thus found to be perfectly practicable, there now only remains for consideration the balance of the advantages of the process with the expense of the operation in any individual case.

In order to a clear understanding of these points, —so much erroneous statement having been put forward on the subject,—it may be well to consider what are the limits of the application of the process, what are the benefits to be derived, and what is the probable cost.

The process is confined in its softening action to those waters of which the hardness is derived from

carbonate of lime, or precisely those which are similarly softened by simple boiling of the water. The action of boiling disengages or expels the free carbonic acid from the water, just as the caustic lime added by Dr. Clark's process neutralizes or takes it up, and the carbonate of lime, no longer held by it in solution, separates, and adheres to the sides and bottom of the vessel.

The advantages of the process may be considered under three heads:—health, comfort, and economy.

1. The comparative wholesomeness of hard and soft water for drinking has been a subject of much discussion of late years, but there does not appear to be any conclusive evidence which would allow of any correct estimate of their comparative effect upon the system. Although there can be little doubt that where waters are impregnated with some 60 or 80 degrees of hardening matter its removal would be beneficial, it is contended by many that chalk, to the extent that it exists in the waters supplied by the London companies, cannot be considered injurious to health. Upon this point we do not pretend to offer an opinion; in speaking of the advantages of the softening process to health, we refer simply to the value which it is said to possess, of removing, *in part*, organic impurity in solution in water, and which ordinary filtration will not disengage. We are not aware that it has been practicable to determine the extent of this property of the process; but that it effectually prevents the rapid vegetation which ensues on the escape of free carbonic acid gas from water derived from the chalk, and allowed to rest, has been most satisfactorily proved at the Woolwich works.

2. The comfort of a soft water for personal ablution and bathing will be admitted by all as no mean consideration in favour of the process.

3. The economy to be derived from the use of the softened water is stated to consist of the saving in tea and other articles of infusion; in soap and in soda; the saving of labour in washing, and of the wear and

tear of clothes; the avoiding of incrustations of engine boilers, kettles, and other vessels.

The chief economy will obviously be in tea and in soap, but while admitting that this must be considerable, we must express our opinion that the savings that have been calculated in these articles from the use of softened water, have been much over-rated.

The Commissioners who reported in 1851 on the chemical quality of the supply of water to the metropolis found that the hardness of London water, *as it is commonly used after boiling*, was about 5 degrees; while without heating it amounts to 14 degrees. It is probable that the water used for making tea may not usually be boiled sufficiently long to reduce the hardness to this extent, and therefore that a saving of tea somewhat considerable would in such case result from the use of water which had undergone the softening process, but we presume that no such economy can be reckoned upon as would be found from the use of the softened water as compared with another which derived its hardness from other sources than carbonate of lime not reducible by boiling. And in the matter of soap, although every hundred gallons of water derived from the chalk strata, are said to be capable of destroying and rendering of no effect 30 ounces of soap more than if it had undergone the softening process, it is obvious that this forms a most erroneous basis of calculation of the actual waste incurred from the use of such water. In all washing operations the soap is effectively used with comparatively a very small quantity of the water in the vessel, the bulk of the water in use being in fact employed in rinsing, in getting rid of the soap that has performed its office, the destruction of which is then no longer of any consequence.

Notwithstanding these over-estimates, however, the great advantages of the softened water cannot be questioned, and they are well worthy consideration in all places supplied with water to which the process is applicable.

The softening process is applicable with most advantage not to river waters but to clear spring waters, such as are usually derived from wells in the chalk, or to other waters of which the hardness is derived from carbonate of lime, but which have acquired no tinge or discolouring admixture.

In this case the precipitated pure carbonate of lime is stated to possess considerable commercial value as an excellent material for whiting, which, according to Mr. Homersham's calculations, would nearly pay for the whole working expenses, and interest on the capital expended for establishing the process. The public would, in such case, enjoy all the advantages of the system almost free of cost.

If the process were applied to a water which has taken up any impurity or discolouring matter, as the water of the Thames, for instance, it is admitted that the precipitate would be valueless; but, notwithstanding this, looking at all the comfort and advantages to be derived from the use of a soft and pure water, we believe that there are few cases in which we should hesitate to recommend its adoption.

As regards the Metropolis, if the application of the softening process had formed one of the requirements of the Act of 1852, many of the companies' arrangements would necessarily have differed widely from those which have been carried out, but considerable savings might probably have been effected in them which would in part have compensated for the additional outlay.

Reckoning the cost of the process upon the experience of the works of the Woolwich and Plumstead Company, the expenditure for works executed *de novo* for the whole of the metropolis would have amounted to about half a million sterling, and the working expenses to about £20,000 per annum; but now that the new works and arrangements of the several companies have been completed, it is impossible to say what expense would be involved in its adoption; and independently of any outlay that might be required in addition to the large sums which the companies have been already called upon to expend,

it is contended that the process would now be in great part unsuitable for, if not quite incompatible with, those works and arrangements just carried out for the improvement of the supplies.

EXAMINATION OF THE RIVER THAMES ABOVE THE NEW SOURCES OF SUPPLY.

In the course of our early examinations of the works of the water companies which derive their supplies from the river Thames, we could not fail to observe the very turbid and discoloured state of the water, an effect that is said to be for the most part due to the clay washed down by the heavy rains, and is found to be common also to the River Lea. But this fact, coupled with our observations in other places, of the injurious effects upon rivers and streams which have arisen from the drainage of the neighbouring towns into them, led us to consider it of importance to inquire as to the amount of deterioration to which the supplies of water furnished to the metropolis might be subject by the drainage of the towns situated above the newly adopted sources.

It is difficult to determine from what amount of population the Thames above Hampton may be said to receive the sewage either directly or by means of its tributaries, but at the smallest computation it is a very considerable number.

We were the more impressed with this point of inquiry from the fact, that the most urgent question which now presents itself in the progress of the sanitary improvement of many of the country towns, of which the drainage has been carried out without proper means for utilising or treating the sewage matter, is the serious pollution of the rivers and streams to which the outfalls are conducted.

The rapidly increased pollution of the Thames from the same cause within tidal influence, during the last few years, has been matter of surprise and comment for some time, and, looking at the evil consequences of such contamination of waters furnished

for domestic use, it is matter for regret that the alteration of the sources of supply was not sooner commenced.

At the time of the outbreak of cholera in 1848, the state of the river at the point whence the Lambeth Company drew their supply was found to be so bad as to induce them to take measures at once for the alteration of their source. At that time the water delivered by the Southwark and Vauxhall Company, taken at ebb-tide and carefully filtered, enjoyed a comparative reputation for purity, and yet within the short period to the succeeding epidemic, the river at this higher point became so rapidly worse as to lead to the fearful increase of mortality which has been so conclusively deduced from a comparison of the death rate among the tenants of the two companies in the same district.

It should be borne in mind that this source of danger in a water supply is scarcely removable by any amount of care on the part of a company. It is not within the control of ordinary filtration. The poison being there in solution, there seems to be no cure but the abandonment of such a source of supply, and the works of the Southwark and Vauxhall Company, for this purpose, were in progress at the very time of the outbreak of cholera which is proved to have committed such increased ravages within this district.

Consideration of these facts led us, as we have said, to an examination of the River Thames above the new sources of supply. We commenced our inspection at Caversham Bridge, above Reading, about 50 miles beyond Hampton, now the highest point of supply on the river. We took 17 samples of the water below the several towns and the tributary streams of the Thames.

The weather was dry during the whole of the time, and our examination satisfied us of a very perceptible increase of matters in suspension in the water in its progress downwards from one point to the other, and this increase was especially noticeable after passing

Windsor and Eton, two towns of which the drainage has been latterly carried out to a great extent, without the adoption of any means for avoiding pollution of the river.

To what extent the danger of such pollution may be obviated by the action of the atmosphere, or by other causes, in so great a length of flow as there is between these places and the sources of metropolitan water supply, we do not suppose that anybody is capable of determining We can only notify the considerable increase of matter in suspension which was perceptible in the water as we passed down the river, and which implied, to our minds, corresponding imimpurity in solution.

We regret that there has been no opportunity for analysing the samples obtained; but, looking at the result of chemical examination of waters of more decided differences of quality than could be conceived to exist in these samples, we should not expect to find much chemical variety noted in them from which any positive conclusions could be formed; for, turning to the "Report of the Commissioners on the Chemical Quality of the Supply of Water to the Metropolis," published in June 1851, we find, in the analyses of those waters in which we should have expected the most marked contrast, namely, those from Lambeth, from Battersea, and from Thames Ditton, the following figures:

Extract from Analyses of Thames Waters.

	Grains in Imperial Gallon.	
	Organic Matter.	Ammonia.
Lambeth - - -	2·59	trace.
Battersea - - -	1·51	0·03
Thames Ditton - - -	2·29	trace.

From this extract it will be observed that the Lambeth water, which was then about to be volun-

tarily abandoned by the Company because of its polluted state, showed very little more organic impurity under chemical analysis than the Thames Ditton water which has been substituted for it. The Battersea water, supplied by the Southwark and Vauxhall Company, to the use of which a dire calamity was so soon to be traced, actually exhibited in this examination far less organic impurity than either of the others, or, indeed, than any of the Thames waters, and showed the minutest quantity only of ammonia.

The Battersea water no doubt had become worse at the time of the subsequent outbreak of cholera, but these are not differences from which the polluted state of the water at Lambeth and at Battersea even in 1851, as compared with that at Thames Ditton, could possibly have been inferred.

Turning also to the analyses contained in the "Report of the Committee for Scientific Inquiries in relation to the Cholera Epidemic of 1854," we find the following figures :—

"Water Supply of London."

Extract from Table of Analyses.

—	Grains of Admixture per Gallon.	
	Organic Matter.	Carbonate of Ammonia.
Lambeth Company. Thames Ditton - -	1·390	·064
Grand Junction Company. Kew - - - -	1·920	—
Chelsea Company. Chelsea - - - -	5·410	—
Southwark and Vauxhall Company. Battersea - - -	3·560	·840

From which it will be observed that although both the Chelsea and Battersea water have organic matter considerably in excess of the supply from Thames

Ditton, the Battersea water has it not so much in excess of the Thames Ditton supply as the Chelsea water has it in excess of the Battersea; while the water from Kew, within the tidal influence, and receiving the drainage of a very large population from immediately above, approaches much more nearly to the quality of the Thames Ditton water. Add to this that the Southwark and Vauxhall water, which was condemned as the worst supply, and the Thames Ditton water, the new source of supply, at that time certainly the best, were the only two waters then furnished to the Metropolis in which any trace of ammonia was found, and the inference will naturally be drawn that chemical analysis does not at present convey an exact understanding of the danger to health which a particular water may occasion. Indeed, we understand it to be an admitted fact that it is a most difficult thing to discover, by any chemical process hitherto adopted, the precise amount of these poisonous ingredients which may produce such injury to the system; while, on the other hand, it is impossible to say how small a quantity of such matter might not, under certain circumstances, be injurious.

Neither can such ingredients be usually detected by the senses. It is true that we found the filtered water of the companies in every case bright to the eye, and pleasant to the taste, but neither eye nor palate will discover even a dangerous amount of impurity in a water when that water is in a fresh and cool state. The waters from the shallow wells of London, perfectly bright as they are, frequently present, under examination, evidence of impurities derived from the innumerable cesspools and sewers with which the metropolis is riddled and traversed; but these impurities may not be detected by the senses. The water always comes cold and sparkling from the pump, and, in ignorance of such dangerous impregnation, it has been almost universally preferred for drinking. The fatal consequences that may ensue from the use of such waters are strikingly evidenced in the report by a committee of the vestry of St.

James's, Westminster, on the Cholera outbreak in that parish.

We are induced to call special attention to the point under consideration, because, when the inquiries were instituted by the General Board of Health in 1850 into the water supply of the metropolis, great stress was laid, apparently with good reason, by the Southwark and Vauxhall Company, upon the analyses conducted by eminent chemists, in opposition to any change of source of that very supply to which such evil consequences have since been traced, and it is not a matter of surprise that, backed by such analyses and by the opinion expressed by three of the first chemists of the day, that this water was, "in the full sense of the term, wholesome and proper for the supply of a town," remonstrances should even more recently have been urged against any such change.

Such a test, now oftentimes repeated, having been found wanting, or at the least uncertain, we venture to warn against too much confidence being placed in the result, if analysis should fail to detect any serious difference of quality between the water of the Thames at Caversham Bridge, and that now supplied from Hampton or Thames Ditton.

We know from experience, at all events, that whatever amount of pollution the river may now derive from the towns along its banks, is as nothing to what it will be when the drainage works, for which some of those towns are already preparing, will have been carried out.

That the water companies themselves are fully alive to the importance of this question, is evident from the large expenses which the Lambeth and the East London Companies have already taken upon themselves, and the New River Company have proposed to take, to remove the more immediate contamination to which their sources of supply are subject from this cause, and, looking at the enormous outlays to which all have been compelled in seeking purer supplies, in justice to them, we consider that measures should be adopted for removing any pre-

ventible cause of contamination which, by future increase may tend to mar the efficiency of the works which have been so well carried out.

But, as a question of public health, how much more would it appear to be an imperative duty, especially keeping in view the lesson which has recently been taught from too long neglect of precautionary measures, to urge that no step be left untaken in a case which involves the purity of the supply of water to nearly the whole population of the metropolis, for although our remarks have been directed more especially to the Thames, they are equally applicable to the Lea and to the Ravensbourne.

In many country towns, complete works of water supply and drainage have been carried out within the last few years, and the authorities, probably conceiving that there the problem of sanitary reform would end, have been content to discharge the whole sewage of their districts into the nearest watercourses. The magnitude of the new evil which arises,—the complete poisoning of the streams,—will, it is hoped, soon work its own remedy, and enforce the application of means for the legitimate disposal of the refuse in the fertilization of the lands. Already have several towns been compelled by legal proceedings, or by agreement with parties interested, to take measures for avoiding pollution of the streams, and there would appear to be no injustice, in any case, in urging upon all towns the adoption of a course which must ultimately tend to their own benefit and advantage.

We venture to hope that consideration of these facts may at least lead to the conclusion that a sufficient case is presented for further inquiry into the removable causes of contamination of the water supply of the metropolis above the present sources of supply.

CONSTANT SUPPLY.

The purer sources of water supply required by the Legislature having now been adopted, and the water filtered and preserved in covered reservoirs from local impurities and atmospheric deterioration, if measures be taken for preventing pollution of the rivers themselves, the only remaining serious cause of contamination will be the cisterns, water-butts, and other means employed for storing the supplies now furnished by the companies. Although considerable improvement has already taken place in the distribution, and the water formerly supplied only on alternate days is now for the most part given daily, except on Sundays, to every part of each Company's district, its storage even from day to day in the private butts and cisterns of most houses, and especially in those of the poorer class, to a great extent destroys the advantages that so much pains have been taken to secure. The only complete remedy for this serious defect will be the constant supply, that is to say, a supply obtained at all times by direct communication of the house service pipes with the constantly charged mains of the companies, thus avoiding the necessity for any means of storage whatever on the private premises.

The constant supply would be the means of rectifying also another serious defect to which the public is not unfrequently liable in the present system, namely, the irregularities of the supply. Notwithstanding that the Companies have abundant means of furnishing any quantity of water that can be legitimately used throughout their districts, loud complaints are too often heard of a want of water in certain localities. The deficiency would appear to arise not from actual lack of water, but from some irregularity from time to time in "*districting*" the service, which the constant supply would obviate. We would allude also to the great advantage of constantly charged mains, in case of fire, as no small consideration, but we refrain from entering at length upon this and other points involved in this important

part of the question of a proper water supply, as the provisions of the Metropolis Water Act, 1852, empowering the inhabitants under certain conditions to require the constant service, do not come into operation until five years after the passing of that Act, namely, 1st July 1857. There appear, however, to be no practical difficulties in the way of this boon to the public. It will involve, no doubt, considerable changes in the private works for the prevention of accident and waste, and the Act provides for the proper examination of these works by the Companies' officers.

SUMMARY.

We beg to present in the tabulated form on the opposite page, a concise view of the main features of the entire works of the metropolis water supply, already separately described.

In bringing the chief works of the several Companies thus into juxtaposition, various anomalies and disproportions become apparent, which seem at first sight to be irreconcilable, such as the quantity of water supplied, the amount of steam power provided, the area of reservoirs and of filter beds, and the cost of the works as compared with the number of houses supplied by each of the Companies. But while, on the one hand, many of these seeming disproportions would doubtless be approximated by a full exposition of the various and special circumstances of each case, it must be borne in mind, on the other hand, that these works are for the most part the progressive growth of many years, under many professional advisers working independently, and under whom, with no uniform plan of action for guidance, very different views would be sure to find expression.

The only disproportion of the kind to which we consider it desirable to direct special attention, as probably affecting at times the quality of the supplies, is the very small amount of filtering area provided in some of these works as compared with that of others.

According to the return furnished by the several Water Companies in 1850, it appeared that 270,581 houses were then supplied with water, the gross daily quantity delivered having been 44,383,332 gallons. It will be observed from the preceding table that the supply of water to the metropolis has now reached the enormous quantity of upwards of 81 million gallons per day, *it having been nearly doubled in the short space of six years.* It is furnished to 328,561 of the 340,000 houses which now form the aggregate within the Registrar General's district. Thus, the

TABLE of the entire WORKS of the METROPOLIS WATER SUPPLY.

List of Metropolis Water Companies.	Sources of Supply.	No. of Houses supplied.	Gross Quantity supplied per Day.	Aggregate nominal Steam Power.	Length of Mains and Branches.	Area of subsiding Reservoirs.	Area of Filter Beds.	Area of open Reservoirs for filtered Water.	Area of covered Reservoirs for filtered Water.	Cost of Works, as per former Return.	Cost of Alterations and of New Works.
			Gallons.	*Horses.*	*Miles.*	*Acres.*	*Acres.*	*Acres.*	*Acres.*	£	£
New River - -	River Lea, Chalk Springs, &c.	95,083	25,000,000	1,442	400 to 500 say 450	66·00	9·00	None.	3·76	1,421,717	566,084
East London - -	River Lea - -	70,000	16,000,000	840	331	None.	12·00	None.	2·50	745,781	250,000
Southwark & Vauxhall.	River Thames, at Hampton.	41,529	10,331,122	1,065	432	7·88	4·40	None.	None.	435,247	214,010
Lambeth - -	River Thames, at Thames Ditton.	28,541	6,109,000	680	206	None.	0·73	1.25	3·00	307,352	301,633
West Middlesex -	River Thames, at Hampton.	25,732	6,895,368	480	178	16·00	4·50	None.	1·75	648,560	157,399
Chelsea - -	River Thames, at Seething Wells.	25,030	5,323,000	700	198½	3·50	2·00	None.	2·50	455,712	472,324
Grand Junction -	River Thames, at Hampton.	17,221	6,714,292	1,440	117	7·69	5·17	None.	1·07	522,295	211,128
Kent - -	River Ravensbourne -	16,077	3,500,000	500	124	5·20	2·65	1·55	None.	202,104	27,022
Hampstead - -	Ponds and Chalk Well	6,348	603,060	72	33½	35·00	0·14	None.	None.	81,231	33,224
Plumstead & Woolwich.	Chalk well - -	3,000	550,000	35	16	0·19	None.	None.	0·32	None.	50,000
	Totals - -	328,561	81,025,842	7,254	2,086	141·46	40·59	2·80	14·90	4,819,999	2,282,824

average daily supply of water for all purposes, which in 1850 was 164 gallons per house, is now, in 1856, 246 gallons per house. The total nominal engine power employed and in reserve is equal to 7,324 horses. The mains and branch pipes for bringing the water from the several sources, and distributing it in the districts, exclusive of the private service pipes, form a total length of 2,086 miles. The filter beds cover an area of upwards of 40 acres. Before the passing of the Metropolis Water Act of 1852, considerably more than half the supply was not filtered; subsiding reservoirs were in such case the only means of clearing the water of impurities in suspension; these are now for the most part employed as well as the filter beds, the total area of subsiding reservoirs in use being upwards of 141 acres in extent. The filtered water is stored in fourteen covered reservoirs comprising an area of nearly 15 acres, and in four uncovered reservoirs, of not quite 3 acres, which are beyond five miles distance from St. Paul's. The cost of the new works executed under the Metropolis Water Act, 1852, and the recent Acts of the several companies, has amounted to £2,282,824, making with the former expenditure, as shown by the returns of 1850, the cost of the entire water works of the metropolis *upwards of seven millions sterling*. Even this amount, however, will fall short of the total expenditure; for the intermediate outlays between the former returns and the passing of the new Acts, and the cost of many works in hand, but not yet complete, are not included in this sum.

In presenting this summary of the establishments to which our inquiries have been directed, we desire to observe, in order to guard against misconception as to the omission of other valuable matter, that we have sought only, in fulfilment of our instructions, to give such a general description of the engineering features of the works of each company as would furnish a correct idea of the aggregate works of metropolitan water supply. Numberless points of details of construction, and information concerning the working of

these establishments, would, no doubt, have been interesting in themselves, but they scarcely appeared to be necessary, keeping in view the main object of the inquiry with which we have had the honour to be intrusted, while such an extension would have involved a very elaborate and lengthened report, the preparation of which would have required much longer time than it appeared desirable to devote to the inquiry.

In conclusion, we desire to observe, as the result of our investigations into the present state of the metropolitan water supply:—

1st. That the requirements set forth in the commencement of our Report, comprising the 1st, 2nd, 3rd, 4th, 14th, and 17th clauses of the Metropolis Water Act, 1852, have, in all essential respects, been fully and satisfactorily complied with by the several Companies, (the provisions for constant supply not coming into operation until the 1st July 1857). The new works have not, in fact, been limited to what a bare compliance with those provisions would have fulfilled. Measures have been adopted for the general improvement of the supplies, which evince a proper anxiety on the part of the companies in the discharge of the duties of their position towards the public.

2nd. That having regard to the serious state of contamination to which many of the rivers and streams of the country are being reduced by the drainage operations carried out in the neighbouring towns, and by the direct discharge of the sewage without any means adopted for the prevention of the pollution of the waters,—a condition which is evidenced to the inhabitants of the metropolis by the suddenly increased pollution of the Thames itself at the points whence their water supply has but recently been drawn,—we desire to recommend that early attention be directed to the towns draining into the Thames and its tributaries, and into the Lea and Ravensbourne, above the present sources of supply, so that measures may be adopted with regard to the drainage of those

places which will permanently preserve the supply of water to the metropolis in its utmost practicable state of purity.

We have the honour to be, Sir,
Your very obedient servants,

HENRY AUSTIN,
Chief Superintending Inspector.

WM. RANGER,
Superintending Inspector.

ALFRED L. DICKENS,
Superintending Inspector.

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For Her Majesty's Stationery Office.

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REPORT

ON THE LAST TWO

CHOLERA-EPIDEMICS OF LONDON,

AS AFFECTED BY THE CONSUMPTION OF

IMPURE WATER;

ADDRESSED TO THE

RT. HON. THE PRESIDENT OF THE GENERAL BOARD OF HEALTH,

BY THE

MEDICAL OFFICER OF THE BOARD.

Presented to both Houses of Parliament by Command of Her Majesty.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.
FOR HER MAJESTY'S STATIONERY OFFICE.

1856.

[2103]

TO THE RIGHT HON. WILLIAM COWPER, M.P., &c.

General Board of Health,
13th May 1856.

SIR,

HAVING at your desire examined certain statistical materials, lately compiled in this Department, I now beg leave to report to you thereon; premising only a few words on what gave rise to that compilation.

You will probably remember that, during the late epidemic of cholera, Sir Benjamin Hall (then President of this Board) convened a *Medical Council* to advise him in relation to the public health; which Council deputed certain of their number, as a *Committee for Scientific Purposes*, to suggest the institution and review the result of such inquiries as might seem likely to elucidate the nature of the prevailing disease; and that the Committee thus originated (consisting of Dr. Arnott, Dr. Baly, Dr. Farr, Professor Owen, and myself) had the honour of presenting to Sir B. Hall, on the 14th July last, a final Report on investigations which were then concluded.

In one important particular this Report was of necessity incomplete. Our Committee had thought it of importance to inquire as fully as possible into the sanitary influence of different qualities of water-supply; especially into the power of unclean drinking-water to aggravate the epidemic ravages of cholera. With this view—under circumstances which offered peculiar opportunities of attaining a conclusive result—we had suggested a particular statistical inquiry. Copious details of information had been in consequence collected; but these could not be brought into an

available form against the time when our Report was made, and we were therefore reluctantly obliged to construct it without reference to them.

These are the materials, which—at length completed according to the intention of the Committee—you have done me the honour of referring for my Report. Accordingly I beg to lay before you the subjoined summary tables; which, as embodying their more important results, constitute the definite reply to a great sanitary question: and in proceeding to comment on these, I revert to that point of view in which the plan of investigation was first conceived.

As often as Asiatic cholera had been epidemic in London, it had been observed to prevail, with especial severity, in certain registration-districts on the south side of the river; viz., in St. Saviour's, St. Olave's, and St. George's, Southwark, in Bermondsey, Newington, Lambeth, Wandsworth, Camberwell, and Rotherhithe.

It is to these nine districts that the inquiry was addressed; and they suggested themselves as the best field for observation, not only because of their high epidemic mortality, but because in them, if anywhere in London, there was to be gathered conclusive evidence for a verdict on the matter at issue;—for a verdict, which should acquit or inculpate certain qualities of water-supply, as bearing on the local prevalence of cholera.

Commonly, in attempting such inferences, the inquirer is baffled by difficulties, which render exact conclusions impossible: for populations drinking different waters will often be living in different circumstances of wealth, comfort, occupation, cleanliness, soil, climate. But in the present case there was a singular freedom from such sources of embarrassment. Throughout the investigated districts masses of similar population were dwelling side by side; and the exterior influences which affected them were, with a single exception, apparently identical.

The one varying condition was the quality of water, as consumed in different households. For throughout those southern districts of London, two great competing water-companies had in past times canvassed house by house for customers; their rival mains were still branching within the same area, often running parallel in the same streets; and during the late invasion of cholera (though now happily the difference has ceased) these two systems of pipes were respectively charged with very different waters.

If, during the epidemic prevalence of cholera, persons consuming pure water are less liable to suffer the disease than persons consuming foul water, surely there might be expected some striking difference between the death-rates of two populations respectively drinking from the Thames at Ditton and from the Thames at Battersea.

And such were the sources of supply of the two companies referred to; *the Lambeth Company* pumping from the higher part of the river, the *Southwark and Vauxhall Company* from the lower; the former furnishing as good a water as any distributed in London, while the latter was purveying perhaps the filthiest stuff ever drunk by a civilized community.

In the *Report of the Committee for Scientific Inquiries*, the contrast of these waters was shown. Microscopical and chemical observations were adduced, as proving the almost incredible foulness of that supplied by the Southwark and Vauxhall Company; how it was not only brackish with the influence of each tide, but contaminated with the outscourings of the metropolis, swarming with infusorial life, and containing unmistakeable molecules of excrement.

In reference to the comparison which had to be made, it is especially important to observe, that the tenantries of these two great companies were not set on different parts of the South London area, each isolated from the other. On the contrary, the two populations were, so to speak, mutually interfused. Of 31 sub-districts into which the large space is divided, only 8 were monopolised by a single water company; while of the remaining 23 each was supplied, sometimes in equal proportion, by one company and the other.

It likewise deserves notice, that the materials for comparison were not on a small scale. It was not village against village. The investigated districts comprise about a fifth of the entire population of London. They contained in 1849 about 466,000 persons, and in 1854 about 511,000.

When, at the latter period (after the termination of the cholera-epidemic) the water-supply was investigated, nearly 25,000 houses could be shown to derive their water-supply from the Lambeth Company; nearly 40,000 from the Southwark and Vauxhall Company; while regarding the remainder (many supplied by pumps and wells) no certain information could be got.

Such were the materials of comparison, so like—except for the one unlikeness of water-supply—and at the same time so ample, as to promise unique facility for determining the matter at issue; and the very decisive results which have been obtained justify the hope with which this laborious inquiry was commenced.

In the 24,854 houses supplied by the Lambeth Company, comprising a population of about 166,906 persons, there occurred 611 cholera deaths, being at the rate of 37 to every 10,000 living. In the 39,726 houses supplied by the Southwark and Vauxhall Company, comprising a population of about 268,171 persons, there occurred 3,476 deaths, being at the rate of 130 to every 10,000 living.

The population drinking dirty water accordingly appears to have suffered 3½ times as much mortality as the population drinking other water.

I am not aware of any fallacy which can much affect this comparison; and I am the more persuaded of its substantial justice, as I find on detailed examination that the same general results are represented (see Tables II. and III.) in almost every separate line of the figures.

Further, if the number be reduced, by omitting from the comparison 11 sub-districts which are almost monopolised by the Southwark and Vauxhall Company; so that there remain (see Table, No. IV.) 20 sub-districts, with a population of more than 365,000 persons, almost equally supplied by the two companies; it is still found, nearly as before, *that the consumers of the cleaner water suffered not a third as much as their neighbours.*

Perhaps the real significance of these totals is best shown by an examination of the details embodied in them; and, for a convenient instance of this kind, there has been prepared a table (No. V.) which illustrates, in respect of 45 streets, the method and materials of comparison. In every one of these streets, the mains of the rival companies run side by side, each supplying its own proportion of houses; so that, although in any one street the number of houses may be unequally divided between the companies, the respective totals are equal—1,517 houses supplied by the Lambeth, 1,517 by the Southwark and Vauxhall Company.

Here then are 3,034 houses, with about 20,000 inmates, divisible, as it were, into two populations, each the exact counterpart of the other, except in the one particular of water-supply. *One of these populations lost* 57 *persons by cholera; the other lost* 164.

Hitherto it has been shown only that in the epidemic of 1853-4, a very large population drinking foul water suffered from cholera more than three-fold as much as a similar population drinking cleanly water.

But this evidence is only a part of the case. It admits of being greatly strengthened by a second group of facts, which the statistical tables exhibit. For the death-registers have been analysed with a view not only to the epidemic visitation of 1853-4, but also to that of 1848-9. It was thought proper to see how far any discoverable influence of foul water had been constant to both occasions; and this comparison is of singular interest for our purpose, because the Lambeth Company, which in 1854 gave the superior water, was in 1848-9 purveying even a worse supply than that of the Southwark and Vauxhall Company.

It has already appeared that the tenantry of the Lambeth Company (a population of 166,906, comprised in 24,854 houses) lost by the epidemic of 1853-4, 611 persons. By the epidemic of 1848-9, in the same houses (or rather, in as many of them as then existed) the deaths were 1,925.

The earlier figures showed that this population suffered in 1853–4 not a third as much as its neighbours: the present figures give the further fact—*that it suffered also not a third as much as at the time of its unreformed water-supply.*

On the other hand, the Southwark and Vauxhall Company, which pumped an impure water in 1848–9, pumped even a worse water in 1853–4;—worse, because the larger population and more extended drainage of London had given it a denser infusion of sewage, and a more revolting unfitness for drink.

Accordingly, in 1853–4, their tenantry suffered 3,476 deaths, against 2,880 registered in 1848–9 for as many of the same houses as were then existing. In this large increase, half would probably be the utmost proportion for which new houses could account; so that on this assumption, although the general metropolitan pressure of the epidemic in 1853–4 was considerably lighter than in 1848-9, the

houses supplied by the Southwark and Vauxhall Company in the late epidemic *suffered probably* 10 *per cent. higher mortality than the same houses in* 1848-9.

In short (corrected, as far as possible, for difference of time) the comparison of the two populations in the two epidemics stands thus:—*In the one population* (notwithstanding a generally lighter invasion of the disease) *the cholera death-rate rose from* 118 *to* 130 *: in the other it fell from* 125 *to* 37.

And what was the only discoverable difference of condition between these two populations? The one had improved its water-supply to comparative excellence; the other drank from even a filthier source than before.

To these facts may be added others not yet adverted to. In collecting the materials for tabulation, it was thought necessary to extract from the register, not only the entries of death by cholera, but likewise those of death by Diarrhœa; and the latter information has been tabulated in precisely the same manner as the former.

Reference to Tables VI. and VII. will show that the results obtained in this branch of the investigation repeat on a smaller scale* the conclusions already suggested.

In houses supplied in 1854 with water by the Lambeth Company, the death-rate from diarrhœa per 10,000 of the population was 21 ; in houses supplied by the Southwark and Vauxhall Company, it was 33. Or, *the population drinking foul water suffered* 57 *per cent more diarrhœal mortality than the population drinking other water.*

And in comparing, with every possible correction, the respective sufferings of these two populations in the two epidemics, we find that on the second occasion diarrhœa, like cholera, pressed more heavily on the one population, though much more lightly on the other. Among the tenantry of the Lambeth Company *the diarrhœal death-rate, which in* 1853–4 *was* 21, *had in* 1848–9 *been* 29 *:* among the tenantry of the Southwark and Vauxhall Company *this rate, which in* 1853–4 *was* 33, *had in* 1848–9 *been only* 27.

* It must be remembered that diarrhœa, unlike cholera, is always present in this country, and that some proportion (hitherto undetermined) of its total amount is irrespective of local sanitary conditions. If air and water were ever so pure, there would still be occurring a certain mortality from diarrhœa, due to tubercular and other irritations of the intestinal canal.

In some elements of these comparisons there may be trifling sources of error; but none, I believe, which can modify—much less vitiate—the general result.

Scarcely under any circumstances, indeed, are the physiological sciences susceptible of greater certainty, than that which seems here to be justified.

An experiment, at which mankind would have shuddered if its full meaning could have been prefigured to them, has been conducted during two epidemics of cholera on 500,000 human beings. One half of this multitude was doomed in both epidemics to drink the same fecalized water, and on both occasions to illustrate its fatal results; while another section—freed in the second epidemic from that influence which had so aggravated the first, was happily enabled to evince by a double contrast the comparative immunity which a cleanlier beverage could give.

By this experiment, it is rendered in the highest degree probable, that, *of the* 3,476 *tenants of the Southwark and Vauxhall Company who died of cholera in* 1853-4, *two-thirds would have escaped if their water-supply had been like their neighbours'*; and that, *of the much larger number—tenants of both companies—who died in* 1848-9, *also two-thirds would have escaped, if the Metropolis Water Act of* 1852 *had but been enacted a few years earlier.*

The above conclusions rest on so large a basis of facts, that I venture to believe they will be accepted as the final solution of any existing uncertainty as to the dangerousness of putrefiable drinking-water during visitations of epidemic cholera; and pathologists will probably admit that the definite proof of hurtfulness, thus established in respect of that one disease, may in principle be extended to the doctrine of other kindred affections.

To many it may appear that such proof needs not to have been sought; for that no reasonable person could ever seriously have doubted as to the hurtful tendency of the water lately distributed by the Southwark and Vauxhall Company. Such reliance on existing convictions would, however, have been misplaced. Not long ago, when there was last a public hearing of this company, its Directors declared the water to be "unexceptionably good;" its Chairman, contending that the works were capable of distributing from the Thames at Battersea a supply

" inferior in no appreciable degree to the stream in any part of its course," remonstrated against any change of source as " a wholly uncalled-for expenditure of capital ;" and gentlemen of deserved eminence as chemists (though perhaps not entitled to speak with equal authority on the causation of disease) were found willing to express opinions both that this water, nourishing a population of animalcules, would "not be noxious" to health, and that "we cannot " in any part of the world connect the ravages of cholera " with the quality of the water" consumed.*

Even last year when our Committee for Scientific Inquiries had the honour of reporting on the materials then collected, we felt bound to express ourselves with some reserve ;† not because our opinions were divided as to the probable danger of drinking such water as that in question ; but because, from the absence of circumstantial proof, we were unable to speak of the danger as an evil demonstrated and measured.

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* See Minutes of Evidence taken before the Select Committee on the Metropolis Water Bill, August 1851; Return to Inquiries of Metropolitan Sanitary Commissioners, 1850 ; and Remarks on the Water-Supply of London by Sir W. Clay, Bart., M.P., Chairman of the Grand Junction and Southwark and Vauxhall Companies, December 1849.

† " We do, however, attach very great importance to the fact, that " nearly all the waters consumed in London show a remarkable aptitude " to develop low forms of animal and vegetable life ; but this importance " belongs, in our judgment, not to any direct influence exerted by such " organisms on our own, but to the indications which their development " affords that the waters wherein they grow are fraught with dead organic " impurities.

" The admixture of *decomposing organic matter* in the water-supply of " the Metropolis being attested equally by chemical analysis and by the " microscopical evidence just adduced, we do not hesitate to speak of this " contamination as one that may have exercised great influence on the " spread of cholera among the population. The general history of this " disease establishes its infinite preference for localities that are fœtid with " organic impurity ; and it is impossible to conceive either any specific " chemical changes arising in the air of a district, or any morbid action " excitable by it in the living body—such changes or such action being " due to its contamination by dead organic admixture—without recognizing " that the water of the district likewise—great solvent of air as it is— " must, if similarly polluted, be liable to undergo the same alteration, and to " originate the same effects, as the atmosphere around it.

" The present state of scientific knowledge does not justify dogmatic " assertions on this subject ; but there are reasons for believing, in " respect not only of cholera, but of many kindred diseases, that the " means and agencies of morbid infection stand in intimate relation to " decaying animal products within and without the body ; and the " slightest taint of organic decomposition within the drinking-water of a " large population therefore constitutes a danger which we cannot but " regard with as much alarm as disgust."—*Report of the Committee for Scientific Inquiries ;* pp. 47, 48.

Nor have later publications hitherto rendered our knowledge more precise. An interesting contribution has indeed been made in the results of a local inquiry, conducted with much care and ability by a Committee of the Vestry of St. James's, Westminster, into the circumstances of that remarkable outbreak of cholera which happened in the neighbourhood of Wardour Street*; and the conclusion which that Committee reported was to the effect, that, in their unanimous opinion, "the sudden, severe, and concentrated outbreak "was in some manner attributable to the use of the impure "water of the well in Broad Street." While, however, it cannot be doubted that the evidence collected by that Committee strongly tends to justify their opinion, other and obvious facts give to the imputed operation at least an exceptional character. Bad as was the produce of the Broad Street well,—containing the results of organic decomposition filtered through but scanty thickness of surrounding soil—this quality of water was not peculiar to it. Generally through London, such must be the condition of superficial well-waters; everywhere filtering from a dangerous proximity to cesspools and sewers; everywhere loaded with nitrates or ammonia; everywhere containing evidence that they represent the drainage of a great manure-bed; and everywhere liable at any moment to contain excremental matter only imperfectly oxidised. In London no comprehensive inquiry could be made into the influence of these well-waters; but almost at the same time that the above investigations were in progress about Soho, others not less elaborate were proceeding at Munich, as part of a general inquiry under direction of the Bavarian Government. The circumstances of the two cases are so far similar, that the water-supply of that capital, as of London, is of various qualities—part brought from a distance, part derived from intramural wells which are liable in no common degree to the impregnations just adverted to; yet in comparing the cholera mortality of populations thus differently supplied, the distinguished Professor who conducted the inquiry found himself unable to attribute to the well-waters any causative relation to the epidemic which had so severely prevailed in the town.†

* Report on the Cholera Outbreak in the Parish of St. James, Westminster, during the Autumn of 1854; presented to the Vestry by the Cholera Inquiry Committee, July 1855.

† Untersuchungen und Beobachtungen über die Verbreitungsart der Cholera; von Dr. Max Pettenkofer, München, 1855.

But while, on the above showing, it must be conceded that for scientific purposes the definite information embodied in the following tables is of no superfluous kind, it may perhaps be objected that the practical application is less obvious, and that the inquiry has been instigated in a matter of past interest. For, since the epidemic of 1853–4, the Southwark and Vauxhall Company, in obedience to the Metropolis Water Act, has abandoned its former very objectionable source of supply, and for the last few months has been distributing a water, nearly or quite identical in quality with that here spoken of as furnished by the Lambeth Company.

This is, indeed, a very satisfactory fact; which, if the final purpose of the investigation had related only to persons suffering from that particular supply, would have superseded all necessity for the present Report.

But the question is of larger scope. Whether water can securely be drunk from rivers polluted by urban drainage, interests more or less every part of the country; and whatever facts can terminate this doubt, bear upon every plan for the water-supply of a population, and upon every plan for the drainage of a town.

Not even London can in this respect afford to consider itself safe against the danger which seems to have been removed from it. Lower than Teddington Lock, indeed, the Thames may not be used as a source of supply; but above that point there dwell beside the river or its tributaries very considerable urban populations; and hitherto the Legislature has not provided against any pollution of refuse which these communities may drain into the stream. At present, perhaps, the mischief is not great; the population is scattered; the drainage incomplete; the admixture, as compared with the volume of the river, almost insignificant. But whatever at this moment may be the amount of the evil, undoubtedly it tends day by day to increase; and that reform, which the Act of 1852 purported to accomplish, remains but imperfect and precarious while those river-side populations exercise a right of sewerage into the drinking-water of London.

It is, indeed, indispensable for the healthiness of towns, that house-drainage should be universally adopted, and that its currents should rapidly discharge themselves beyond the inhabited area. But the advantages thus to be gained will

suffer a serious counterpoise, if they can be purchased only at the cost of making the sewerage-outfall into rivers; if the change must be, from an unwholesome house to a polluted water-source; if that which would have been poison to inhale is to return as poison to drink.

Between these alternatives, it is greatly to be feared, lies the present choice of many considerable populations. Town drainage has been executed of late years, with too little recognition that its accomplishment, however successful, represents only part of a great problem. From it there results the production, as it were, of a novel commodity; valuable, if at the right time it can be at the right place, but otherwise valueless and baneful; for in default of that market which only good organization can create, the nearest water-course has to be fouled with what might enrich the fields. Even apart from such new pollution, it rarely happens that rivers are first-rate sources of supply: but they are often the easiest of application; and communities living along their course will generally overlook the worse quality for the sake of the cheaper price. Often therefore as town-drainage extends, successive populations adown the stream get worse and worse water to drink; till the evil at length attains those large and dangerous dimensions which, in respect of a single water-supply, it has been the object of this investigation to trace.

From the sanitary dilemma which these considerations suggest, the only possible escape seems to lie in the organization of means for the systematic agricultural employment of sewage.

Hence it is greatly to be hoped that the engineering genius and commercial enterprise of the country may render such means available and lucrative for all urban populations. But, provisionally, it seems important to determine, whether convenient appliances exist for the so-called disinfection of sewage; and whether it would be expedient to enforce their adoption, as a restraint on the otherwise universal tendency towards draining putrefiable refuse into the drinking-waters of the country.

IN conclusion, I beg to guard this Report against the misapprehension to which so fragmentary a scientific discussion is liable.

The inquiry has of necessity been restricted. It did not pretend to determine whether putrefiable drinking-water is a stronger or a weaker morbific influence than impure air or

defective nourishment. Simply, it asked whether in certain large populations, breathing the same atmosphere, comprehending the same classes, and averaging the same habits of life, the fatal disease had been more prevalent among the drinkers of foul water than among the drinkers of clean water.

The answer has been affirmative. The cholera-mortality of the former class was more than three-fold that of the latter.

The value of this result rests, of course, on the assumption that other influences of disease (whatever they may have been) were equal in the populations compared. For aught that appears to the contrary, it may be true that in every individual case of the 15,212 deaths inquired into, the sanitary arrangements of the house (apart from the quality of its water-supply) were defective. But this would not affect the argument of the Report: for there is no reason to suppose that such defects would be on the average unequally distributed between the two great totals of intermixed population respectively supplied by the two Companies: nor, especially, is it within the limits of reasonable supposition that throughout a continuous urban plan of seventy thousand houses, the removal of sanitary defects during five years should have been effected exclusively, as it were, on alternate houses and alternate streets, according to the accident of their water-supply.

So, too, among the sufferers there may have been a large proportion of poverty, with its attendant defects of nourishment; but this influence also must be supposed to have been impartially distributed between the tenantries of the two water-companies.

The present contribution therefore aims only at giving a more exact knowledge of one cause, not at gainsaying the existence of other causes.

"The doctrine of epidemic cholera which has gained almost universal acceptance, does not affect to explain what may be that power—the exciting cause of the epidemic manifestation—which at intervals of time has forayed from place to place about our globe, sometimes vaguely spreading over a widened area, sometimes seeming to move in more defined procession, and which now for the third time has shed its fatal influence on our land. But with this mystery still unsolved, there has grown more and more into shape a doctrine which is both intelligible and practical; that the undiscovered power in its wanderings acts after the manner

of a *ferment*, that it therefore takes effect only amid congenial circumstances, and that the stuff out of which it brews poison must be air or water abounding with organic impurity."*

It is only to a part of the above doctrine that the preceding pages immediately refer: but to this part they give a new proof, and to the remainder an indirect confirmation.

It entirely consists with the facts here set forth to maintain that, under the specific influence which determines an epidemic period, fecalised drinking-water and fecalised air equally may breed and convey the poison; and that this, whether in one vehicle or the other, may be expected to prevail most forcibly against the feeble and ill-nourished parts of a population.

I have the honour to be,
Sir,
Your obedient humble Servant,
JOHN SIMON.

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* Report of the Committee for Scientific Inquiries in relation to the Cholera Epidemic of 1853–4; p. 48.

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NOTE.

In the Surrey districts of London *the aggregate population* of 1853-4 probably exceeded that of 1848-9 by about a tenth part. In the absence of precise information it may be assumed as nearly true, that *the number of houses* there had increased in the same proportion, *the average population per house* remaining constant at 6.7 ; and that this increase had told *equally on each of the three classes of houses* distinguished in the Tables; viz., that, of the houses and population supplied in 1853-4 by the Lambeth Company, about one eleventh part was non-existent in 1848-9 ; that similarly, of the houses and population supplied in 1853-4 by the Southwark and Vauxhall Company, about one eleventh part was non-existent in 1848-9; that similarly, of the houses and population supplied in 1853-4 from "unknown sources," about one eleventh part was non-existent in 1848-9.

Independently of this increase of population, the two companies increased their tenantry between the two epidemics. Their opposition had ceased, and they did not exchange customers; but many houses which in 1853-4 were returned as supplied by the Lambeth Company, or by the Southwark and Vauxhall Company, were in 1848-9 dependent on "unknown sources."

There are not materials for making with perfect accuracy a second distribution of the population according to its water-consumption in 1848-9; and, therefore, the argument of the Report has been so constructed as to avoid this somewhat speculative ground.

The following is all which admits of being definitely stated with respect to the population supplied with water from "unknown sources." In the epidemic of 1853-4, over and above the 64,580 houses verified as supplied by the two great water-companies, there were certain other houses (of uncertain number) which furnished 1,436 cholera deaths. In the epidemic of 1848-9 in these same houses, or rather in the about 10-11ths of them probably then existing, there were 1,760 such deaths; so that, treating this population like the more definite populations spoken of in the Report, we find its per-centage of cholera mortality, in 1853-4, fully a fourth lighter than in 1848-9. This difference nearly corresponds to that which has been calculated for the Metropolis generally, and which has been ascribed to a milder visitation of the epidemic cause. From it, of course, no conclusion can be drawn relatively to the population itself. Nearly all may have been drinkers of well-water; or many may have been unacknowledged debtors to the supply of the Lambeth Company. But whatever may have been the cause of their lessened suffering, it contributes, by contrast, to expose that opposite influence which was operating within the same districts on the tenants of the Southwark and Vauxhall Company.

I.—SYNOPSIS OF RESULTS.

Death-Rates *per* 1,000 of living Population in Two Epidemic Periods.		In Houses enumerated in 1854 as receiving their Water-supply— from the LAMBETH Company.	In Houses enumerated in 1854 as receiving their Water-supply— from the SOUTHWARK and VAUXHALL Company.
CHOLERA	1848-9..	12.5	11.8
	1853-4..	3.7	13.0
DIARRHŒA	1848-9..	2.9	2.7
	1853-4..	2.1	3.3

N.B—Between the two Epidemic Periods, the Lambeth Water Company had changed its source of supply.

II.—Houses, Population, Water-Supply, and Chole

Registration District.	I. Number of inhabited Houses in 1851.	II. Population. Estimated Population in 1849.	1851.	Estimated Population in 1854.	Estimated constant
26. St. Saviour's, Southwark (*with Hospital*)	4,600	35,162	35,731	36,603	7
27. St. Olave* (*with Hospital*) . . .	2,360	19,115	19,375*	19,524	8
28. Bermondsey†	7,907	45,082	48,128	50,720	6
29. St. George's, Southwark . .	6,992	50,141	51,824	53,509	7
30. Newington	10,458	62,698	64,816	66,034	6
31. Lambeth	20,447	134,357	139,325	148,274	6
32. Wandsworth	8,276	48,553	50,764	54,316	6
3. Camberwell	9,412	50,951	54,667	59,873	5
34. Rotherhithe	2,792	16,949	17,805	19,171	6
Not identified	.	.	.	.	6
Totals and means for whole Area . .	72,344	463,008	482,435	508,024	6·
Ditto, by a different and somewhat more exact estimate of the district populations‡	,,	466,105	,,	511,435	,,

* During the decennial period 1841–51 there was a decrease of population (462) in the District of St. O pulled down since 1851 the population of this year will probably answer nearly enough for that of 1854.

† Since 1851 a great amount of house-building has taken place in Bermondsey; whence it comes tha are counted into the 8,670 houses of the district some ends of streets which have passed the true regist

‡ The decennial period following the census of 1841 expired on March 31st 1851; but the census of the not to ten years, but to ten years *plus* 68 days. In the *sub-district* estimates of population for 1849 and *decennial* increase of population due to this excess of 68 days. An exact estimate of the *district* popul

ATHS in the Nine Surrey Districts of London.

III. Number of Houses and estimated Number of Persons supplied in 1854 with Water as under; —				IV. Number of Deaths from Cholera in Houses which in 1854 were supplied with Water as under; —						V. Proportion of Deaths from Cholera, per 1,000 of estimated Population, in Houses which in 1854 were supplied with Water as under; —			
by the Lambeth Company.		by the Southwark and Vauxhall Company.		by the Lambeth Company.		by the Southwark and Vauxhall Company.		from unknown sources.		by the Lambeth Company.		by the Southwark and Vauxhall Company.	
Houses.	Estimated Population.	No. of Houses.	Estimated Population.	1848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.
,089	14,201	2,631	19,617	236	103	272	410	44	38	17·3	7·3	14·4	20·9
0	0	2,193	18,638	0	0	307	297	62	44	0	0	16·8	15·9
268	1,785	8,402	57,884	15	11	·698	·854	60	58	9·4	6·2	13·6	14·8
,183	23,712	3,419	25,039	314	96	409	426	145	103	14·1	4·1	17·4	17·0
,473	33,531	5,224	31,940	382	130	324	391	220	220	12·0	3·9	10·7	12·2
,763	83,786	8,077	44,982	924	252	329	447	411	304	12·2	3·0	8·1	9·9
618	3,870	3,028	18,390	2	0	136	178	367	272	0·6	0	8·3	9·7
,835	10,478	4,005	23,472	52	19	252	307	234	255	5·8	1·0	12·6	13·1
0	0	2,336	14,951	0	0	153	166	217	142	0	0	11·5	11·1
25	165	411	2,712	.	.	.	.	.	.	.	.	.	.
,854	171,528	39,726	257,625	1,925	611	2,880	3,476	1,760	1,436	12·2	3·6	12·2	13·5
»	166,906	»	268,171	»	»	»	»	»	»	12·5	3·7	11·8	13·0

umber of houses having been taken down for the termini at London Bridge; but as few houses have been

trict has in the third section of the table more houses than in the first. Perhaps also in this section there ndary.

r was not taken till June 7th; so that the increase of population then recorded was due, strictly speaking, d in their totals which are transferred to this table, allowance was not made for the *somewhat more than* ade with this correction) gives the results exhibited in the supplementary line of figures.

III.—Houses, Population, Water-Supply, and Chole

Registration District.	Registration Sub-District.	I.	II. Population.			
		Number of inhabited Houses in 1851.	Estimated Population in 1849.	1851.	Estimated Population in 1854.	
26. St. Saviour's, Southwark.	1 Christchurch	1,887	15,730	16,022	16,470	
	2 St. Saviour's (*with Hospital*)	2,713	19,432	19,709	20,133	
	Houses supplied in streets where no death occurred.	—	—	—	—	
27. St Olave	1 St. Olave* (*with Hospital*)	880	8,015	8,015	8,015	
	2 St. John	1,480	11,100	11,360	11,509	
	Houses supplied in streets where no death occurred.	—	—	—	—	
28. Bermondsey	1 St. James	2,863	17,386	18,899	19,134	
	2 St. Mary Magdalen	1,865	12,942	13,934	15,442	
	3 Leather-market	2,279	14,754	15,295	16,144	
	Houses supplied in streets in which no death occurred.	—	—	—	—	
29. St. George's, Southwark.	1 Kent-road	2,558	17,016	18,126	18,933	
	2 Boro'-road	2,069	15,635	15,862	16,208	
	3 London-road	2,365	17,490	17,836	18,368	
	Houses supplied in streets in which no death occurred.	—	—	—	—	
30. Newington	1 Trinity	3,224	20,651	20,922	21,335	
	St Peter, Walworth	4,925	28,392	29,861	30,080	
	3 St. Mary	2,309	13,655	14,033	14,619	
	Houses supplied in streets in which no death occurred.	—	—	—	—	
31. Lambeth	1 Waterloo, 1st.	1,729	13,807	14,088	14,521	
	2 Do. 2nd.	2,191	18,137	18,348	18,668	
	*3 Lambeth Church, 1st.	2,451	18,409	18,409	18,409	
	4 Do. do. 2nd.	3,849	25,965	26,784	28,062	
	5 Kennington, 1st.	3,977	22,926	24,261	27,401	
	6 Do. 2nd.	3,288	17,774	18,848	20,583	
	7 Brixton	2,362	13,590	14,610	16,285	
	8 Norwood	600	3,749	3,977	4,345	
	Houses supplied in streets in which no deaths occurred.	—	—	—	—	

* In this Sub-district between the two periods of Census, the number of houses was lessened for about the same as in 1849.

DEATHS, in the Thirty-one Surrey Sub-districts of London.

III. Number of Houses and estimated Number of Persons supplied in 1854 with Water as under;—				IV. Number of Deaths from Cholera in Houses which in 1854 were supplied with Water as under;—					
by the Lambeth Company.		by the Southwark and Vauxhall Company.		by the Lambeth Company.		by the Southwark and Vauxhall Company.		from unknown sources.	
No. of Houses.	Estimated Population.	No. of Houses.	Estimated Population.	1848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.
1,557	13,234	343	2,915	215	84	31	30	19	13
125	898	2,238	16,337	21	19	211	380	25	25
9	69	50	365	0	0	0	0	0	0
0	0	961	8,745	0	0	144	173	24	10
0	0	1,170	9,360	0	0	163	124	38	34
0	0	62	533	0	0	0	0	0	0
105	693	3,511	23,173	4	6	216	338	41	44
0	0	2,301	17,258	0	0	260	264	10	11
163	1,092	2,090	14,003	11	5	222	252	9	3
0	0	500	3,450	0	0	0	0	0	0
563	3,997	1,779	12,630	65	16	173	174	49	29
878	6,672	1,176	8,937	78	44	190	210	52	47
1,533	11,497	383	2,872	171	36	46	42	44	27
209	1,546	81	600	0	0	0	0	0	0
1,372	8,370	1,661	10,132	134	39	134	139	57	46
1,758	10,724	2,340	14,274	158	55	169	213	123	151
899	5,484	489	2,983	90	36	21	39	49	23
1,444	8,953	734	4,551	0	0	0	0	0	0
1,474	11,939	438	3,548	147	27	21	26	32	9
1,510	12,533	864	7,171	156	42	55	62	43	24
2,117	15,878	415	3,113	158	26	25	16	38	21
2,289	16,023	1,124	7,868	396	112	74	70	88	33
444	2,708	2,586	15,775	20	16	133	200	39	105
986	5,620	1,206	7,874	14	12	8	60	133	76
1,509	9,356	310	1,922	32	16	13	13	37	27
160	1,066	0	0	1	1	0	0	1	9
1,274	8,663	1,184	7,711	0	0	0	0	0	0

construction of the railway terminus; and the population may be fairly estimated to have been in 1851

III.—Houses, Population, Water-Supply, and Cholera-Dea

Registration District.	Registration Sub-District.	I. Number of inhabited Houses in 1851.	II. Population. Estimated Population in 1849.	1851.	Estimated Population in 1854.	Estimated constant
32. Wandsworth	1. Clapham	2,657	15,622	16,290	17,306	6
	2. Battersea	1,760	9,618	10,560	12,150	6
	3. Wandsworth	1,522	9,173	9,611	10,306	6
	4. Putney	918	5,155	5,280	5,473	5
	5. Streatham	1,419	8,985	9,023	9,081	6
	Houses supplied in streets in which no death occurred.	—	—	—	—	6
33. Camberwell	1. Dulwich	259	1,632	1,632	1,632	6
	2. Camberwell	2,851	16,932	17,742	18,921	6
	3. Peckham	3,457	17,809	19,444	22,182	5
	4. St. George	2,845	14,578	15,849	17,138	5
	Houses supplied in streets where no death occurred.	—	—	—	—	5
34. Rotherhithe	Rotherhithe	2,792	16,949	17,805	19,171	6
	Houses supplied in streets where no death occurred.	—	—	—	—	6
	Not identified	—	—	—	—	6
	Totals	72,344	463,008	482,435	508,024	—

the Thirty-one Surrey Sub-Districts of London—*continued.*

III. Number of Houses and estimated Number of Persons supplied in 1854 with Water as under; —				IV. Number of Deaths from Cholera in Houses which in 1854 were supplied with Water as under; —					
by the Lambeth Company.		by the Southwark and Vauxhall Company.		by the Lambeth Company.		by the Southwark and Vauxhall Company.		from unknown sources.	
No. of Houses.	Estimated Population.	No. of Houses.	Estimated Population.	1848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.
22	134	1,106	6,747	2	0	84	95	34	83
46	276	1,046	6,276	0	0	52	82	68	99
15	94	144	907	0	0	0	1	103	65
0	0	13	74	0	0	0	0	8	9
515	3,244	0	0	0	0	0	0	154	16
20	122	719	4,386	0	0	0	0	0	0
4	25	0	0	1	0	0	0	0	0
103	639	1,474	9,139	1	1	114	181	116	74
70	392	971	5,438	0	1	36	67	59	119
971	5,437	767	4,295	50	17	72	59	59	62
687	3,985	793	4,600	0	0	0	0	0	0
0	0	1,909	12,218	0	0	153	166	217	142
0	0	427	2,733	0	0	0	0	0	0
25	165	411	2,712	0	0	0	0	0	0
24,854	171,528	39,726	257,625	1,925	611	2,880	3,476	1,760	1,436

IV.—Houses, Population, Water-Supply, and Cholera-Deaths in

Registration District.	I. Number of Inhabited Houses in 1851.	II. Population. Estimated Population in 1849.	1851.	Estimated Population in 1854.	Estimated constant
26. St. Saviour's, Southwark (*with Hospital*)	4,600	35,162	35,731	6,603	
29. St. George's, Southwark . . .	6,992	50,141	51,824	53,509	
30. Newington	10,458	62,698	64,816	66,034	
31. Lambeth	20,447	134,357	139,325	148,274	
33. Camberwell	9,412	50,951	54,667	59,873	
Totals and means for whole Area . .	51,909	333,309	346,363	364,293	
Ditto, by a different and somewhat more exact estimate of the district-populations*	,,	335,673	,,	365,325	

* The decennial period following the census of 1841 expired on March 31st 1851; but the census of t
not to ten years, but to ten years *plus* 68 days. In the *sub-district* estimates of population for 1849 a
decennial increase of population due to this excess of 68 days. An exact estimate of the *district* pop

Districts (Twenty Sub-districts) supplied in almost equal proportions by the Two Companies.

III. Number of Houses and estimated number of Persons supplied in 1854 with Water as under;—				IV. Number of Deaths from Cholera in Houses which in 1854 were supplied with Water as under;—						V. Proportion of Deaths from Cholera per 1,000 of estimated Population, in Houses which in 1854 were supplied with Water as under;—			
by the Lambeth Company.		by the Southwark and Vauxhall Company.		by the Lambeth Company.		by the Southwark and Vauxhall Company.		from unknown sources.		by the Lambeth Company.		by the Southwark and Vauxhall Company.	
No. of Houses.	Estimated Population.	No. of Houses.	Estimated Population.	1848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.
1,689	14,201	2,631	19,617	236	103	272	410	44	38	17·3	7·3	14·4	20·9
3,183	23,712	3,419	25,039	314	96	409	426	145	103	14·1	4·1	17·4	17·0
5,473	33,531	5,224	31 940	382	130	324	391	220	220	12·0	3·9	10·7	12·2
11,763	83,786	8,077	44,982	924	252	329	447	411	304	12·2	3·0	8·1	9·9
1,835	10,478	4,005	23,472	52	19	252	307	234	255	5·8	1·0	12·6	13·1
23,943	165,708	23,356	145,050	1,908	600	1,586	1,981	1,054	920	12·5	3·6	11·9	13·7
„	161,123	„	156,091	„	„	„	„	„	„	12·8	3·7	11·0	12·7

ear was not taken till June 7th; so that the increase of population then recorded was due, strictly speaking, nd in their totals which are transferred to this table, allowance was not made for the *somewhat more than* made with this correction) gives the results exhibited in the supplementary line of figures.

V.—Cholera-Deaths in 3,034 Houses sup

Registration District.	Registration Sub-District.	Name of Street, Place, &c. &c. &c.	Number of Houses plied with Wat under;— by the Lambeth Company.	by Sout a Vau Com
St. Saviour's, Southwark.	1. Christchurch 2. St. Saviour's	Gravel-lane	87	
	1. Christchurch	Thurlow-street	9	
	2. St. Saviour's	Duke's-court	12	
		Ewer-street	63	
St. George's, Southwark.	1. Kent-road	Hunter-street	18	
		Mason-street	16	
		Townsend-street	18	
	2. Borough-road	Friar-street	45	
		Hill-street	27	
		Gun-street	26	
		Suffolk-street	46	1
		Wellington-street	33	
Newington	1. Trinity	Brunswick-street	15	
		St. Andrew's-road and place	30	
		William-street	17	
	2. St. Peter, Walworth	Trafalgar-street	203	
	3. St. Mary	Lion-street	29	
		Manor-place	25	
		Staverton-row	8	
		Weymouth-street	59	
Lambeth	Waterloo, 1st.	Brad-street	23	
		Webber-street	32	
	Do. 2nd.	Gibson-street	25	
		Griffen-street	6	
		Isabella-street	33	
		James-street	67	
		Oakley-street	45	
		Thomas-street	25	
	Lambeth Church, 1st.	Canterbury-place	36	
	Do. do. 2nd.	East-street	90	
		Jonathan-street	5	
		King-street	50	
		Richmond-street	27	
		Saunders-street	18	
		Tyers-terrace	7	
		Vauxhall-street	48	
	Kennington, 1st.	Lower Kennington-green	26	
		Mansion House-street	19	
		Prince's-square	21	
		Regency-place	14	
		White Hart-street	77	
	Do. 2nd.	Cranmer-road	10	
Camberwell	2. Camberwell	Pleasant-row	10	
		Westmoreland-place	12	
	4. St. George	Cumberland-place	5	
		Total	1,517	1,

he Two Companies in equal Proportions.

Number of Deaths from Cholera in Houses which in 1854 were supplied with Water as under; —						Name of Street, Place, &c. &c. &c.
by the Lambeth Company.		by the Southwark and Vauxhall Company.		from unknown sources.		
848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.	
7	10	8	11	0	0	Gravel-lane.
2	0	2	2	0	0	Thurlow-street.
1	2	0	1	0	0	Duke's-court.
12	5	5	7	0	0	Ewer-street.
4	0	10	6	0	0	Hunter-street.
1	2	1	1	0	0	Mason-street.
1	1	3	1	1	0	Townsend-street.
5	2	9	4	2	3	Friar-street.
0	4	1	2	0	0	Hill-street.
3	1	5	6	0	0	Gun-street.
0	0	10	20	0	2	Suffolk-street.
6	2	2	2	2	1	Wellington-street.
3	0	1	2	0	6	Brunswick-street.
5	1	4	9	0	0	St. Andrew's-road and place.
0	0	0	0	7	10	William-street.
14	4	2	4	0	0	Trafalgar-street.
10	3	0	0	3	0	Lion-street.
2	0	0	4	0	0	Manor-place.
5	1	0	0	0	0	Staverton-row.
2	2	0	0	0	0	Weymouth-street.
5	0	1	4	0	0	Brad-street.
1	0	0	3	0	0	Webber-street.
3	0	2	7	0	0	Gibson-street.
0	1	3	4	0	0	Griffen-street.
0	2	4	5	0	0	Isabella-street.
12	1	4	6	1	1	James-street.
4	1	4	5	0	0	Oakley-street.
7	0	0	4	0	0	Thomas-street.
3	1	0	0	0	0	Canterbury-place.
15	1	2	8	4	1	East-street.
2	0	0	1	0	0	Jonathan-street.
6	1	0	0	0	0	King-street.
4	1	0	1	0	0	Richmond-street.
2	2	0	2	2	0	Saunders-street.
1	1	1	1	0	0	Tyers-terrace.
1	0	1	2	3	0	Vauxhall-street.
0	0	1	3	0	0	Lower Kennington-green.
4	2	0	3	0	0	Mansion House-street.
1	0	1	4	0	1	Prince's-square.
0	2	2	3	0	0	Regency-place.
3	0	1	5	1	0	White Hart-street.
0	0	2	4	0	0	Cranmer-road.
0	0	2	0	0	0	Pleasant-row.
0	0	1	2	0	0	Westmoreland-place.
0	1	0	5	0	2	Cumberland-place.
164	57	95	164	26	21	

VI.—Houses, Population, Water-Supply, and Diar

Registration District.	I. Number of Inhabited Houses in 1851.	II. Population. Estimated Population in 1849.	1851.	Estimated Population in 1854.	Estimated constant
26. St. Saviour's, Southwark (*with Hospital*)	4,600	35,162	35,731	36,603	
27. St. Olave* (*with Hospital*) . . .	2,360	19,115	19,375*	19,524	
28. Bermondsey†	7,007	45,082	48,128	50,720	
29. St. George's, Southwark . . .	6,992	50,141	51,824	53,509	
30. Newington	10,458	62,698	64,816	66,034	
31. Lambeth	20,447	134,357	139,325	148,274	
32. Wandsworth	8,276	48,553	50,764	54,316	
33. Camberwell	9,412	50,951	54,667	59,873	
34. Rotherhithe	2,792	16,949	17,805	19,171	
Not identified	. .	.	.	.	
Totals and means for whole Area . . .	72,344	463,008	482,435	508,024	
Ditto, by a different and somewhat more exact estimate of the district-populations‡	,,	466,105	,,	511,435	

* During the decennial period 1841–51 there was a decrease of population (462) in the District of S pulled down since 1851, the population of this year will probably answer nearly enough for that of 1854.

† Since 1851 a great amount of house-building has taken place in Bermondsey; whence it comes are counted into the 8,670 houses of the district some ends of streets which have passed the true re

‡ The decennial period following the census of 1841 expired on March 31st 1851; but the census of not to ten years, but to ten years *plus* 68 days. In the *sub-district* estimates of population for 1849 *decennial* increase of population due to this excess of 68 days. An exact estimate of the *district* po

ATHS in the Nine Surrey Districts of London.

III. Number of Houses and estimated Number of Persons supplied in 1854 with Water as under; —				IV. Number of Deaths from Diarrhœa in Houses which in 1854 were supplied with Water as under; —						V. Proportion of Deaths from Diarrhœa, per 1,000 of estimated Population, in Houses which in 1854 were supplied with Water as under; —			
by the Lambeth Company.		by the Southwark and Vauxhall Company.		by the Lambeth Company.		by the Southwark and Vauxhall Company.		from unknown sources.		by the Lambeth Company.		by the Southwark and Vauxhall Company.	
Houses.	Estimated Population.	No. of Houses.	Estimated Population.	1848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.
1,689	14,201	2,631	19,617	63	46	72	135	14	14	4·6	3·2	3·8	6·9
0	0	2,192	18,638	0	0	62	31	4	4	0	0	3·4	1·7
208	1,785	8,402	57,884	3	3	168	201	6	5	1·9	1·7	3·3	3·5
3,183	23,712	3,419	25,039	62	39	79	110	25	36	2·8	1·6	3·4	4·4
5,473	33,531	5,224	31,940	68	42	64	94	38	60	2·1	1·3	2·1	3·0
1,763	83,786	8,077	44,982	236	203	79	137	62	120	3·1	2·4	1·9	3·0
618	3,870	3,028	18,390	1	0	25	55	87	98	0·3	0	1·5	3·0
1,835	10,478	4,005	23,472	9	10	64	78	57	92	1·0	1·0	3·2	3·3
0	0	2,336	14,951	0	0	38	57	20	48	0	0	2·9	3·8
25	165	411	2,712	•	•	•	•	•	•	•	•	•	•
4,854	171,528	39,726	257,625	442	343	651	898	313	477	2·8	2·0	2·8	3·5
„	166,906	„	268,171	„	„	„	„	„	„	2·9	2·1	2·7	3·3

number of houses having been taken down for the termini at London Bridge; but as few houses have been
stried has in the third section of the table more houses than in the first. Perhaps also in this section there
undary
ar was not taken till June 7th; so that the increase of population then recorded was due, strictly speaking,
d in their totals, which are transferred to this table, allowance was not made for the *somewhat more than*
ade with this correction) gives the results exhibited in the supplementary line of figures.

VII. Houses, Population, Water-Supply, and Diarre

Registration District.	Registration Sub-District.	I. Number of Inhabited Houses in 1851.	II. Population. Estimated Population in 1849.	1851.	Estimated Population in 1854.
26. St. Saviour's Southwark.	1. Christchurch	1,887	15,730	16,022	16,470
	2. St. Saviour (*with Hospital*)	2,713	19,432	19,709	20,133
	Houses supplied in streets in which no death occurred.	—	—	—	—
27. St. Olave	1. St. Olave (*with Hospital*)	880	8,015	8,015	8,015
	2. St. John	1,480	11,100	11,360	11,509
	Houses supplied in streets in which no death occurred.	—	—	—	—
28. Bermondsey	1. St. James	2,863	17,386	18,899	19,134
	2. St. Mary Magdalen	1,865	12,942	13,934	15,442
	3. Leather Market	2,279	14,754	15,295	16,144
	Houses supplied in streets in which no death occurred.	—	—	—	—
29. Saint George Southwark.	1. Kent-road	2,553	17,016	18,126	18,933
	2. Borough-road	2,069	15,635	15,862	16,208
	3. London-road	2,365	17,490	17,836	18,368
	Houses supplied in streets in which no death occurred.	—	—	—	—
30. Newington	1. Trinity	3,224	20,651	20,922	21,335
	2. St. Peter, Walworth	4,925	28,392	29,861	30,080
	3. St. Mary	2,309	13,655	14,033	14,619
	Houses supplied in streets in which no death occurred.	—	—	—	—
31. Lambeth	1. Waterloo, 1st	1,729	13,807	14,088	14,521
	2. Do. do. 2nd	2,191	18,137	18,348	18,668
	3. Lambeth Church, 1st	2,451	18,409	18,409	18,409
	4. Do. do. 2nd	3,849	25,965	26,784	28,062
	5. Kennington, 1st	3,977	22,926	24,261	27,401
	6. Do. do. 2nd	3,288	17,774	18,848	20,583
	7. Brixton	2,362	13,590	14,610	16,285
	8. Norwood	600	3,749	3,977	4,345
	Houses supplied in streets in which no death occurred.	—	—	—	—

* In this Sub-district between the two periods of census, the number of houses was lessened for about the same as in 1849.

I ŒA.

ths in the Thirty-one Surrey Sub-districts of London.

III. Number of Houses and estimated Number of Persons supplied in 1854 with Water as under; —				IV. Number of Deaths from Diarrhœa in Houses which in 1854 were supplied with Water as under; —					
by the Lambeth Company.		by the Southwark and Vauxhall Company.		by the Lambeth Company.		by the Southwark and Vauxhall Company.		from unknown sources.	
Houses.	Estimated Population.	No. of Houses.	Estimated Population.	1848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.
557	13,234	343	2,915	55	36	6	6	6	6
123	898	2,238	16,337	8	10	66	129	8	8
9	69	50	365	0	0	0	0	0	0
0	0	961	8,745	0	0	20	18	2	1
0	0	1,170	9,360	0	0	42	13	2	3
0	0	62	533	0	0	0	0	0	0
165	693	3,511	23,173	1	1	47	60	3	3
0	0	2,301	17,258	0	0	63	72	3	1
163	1,092	2,090	14,003	2	2	58	69	0	1
0	0	500	3,450	0	0	0	0	0	0
563	3,997	1,779	12,630	21	10	31	52	7	8
878	6,672	1,176	8,937	14	11	42	50	5	16
533	11,497	383	2,872	27	18	6	8	13	12
209	1,546	81	600	0	0	0	0	0	0
372	8,370	1,661	10,132	27	16	32	40	11	13
758	10,724	2,340	14,274	27	20	28	51	20	40
899	5,484	489	2,983	14	6	4	3	7	7
444	8,953	734	4,551	0	0	0	0	0	0
474	11,939	438	3,548	32	14	5	6	2	13
510	12,533	864	7,171	32	20	11	21	3	16
117	15,878	415	3,113	39	45	5	4	9	9
289	16,023	1,124	7,868	92	89	9	29	14	12
444	2,708	2,586	15,775	3	5	35	62	7	34
986	5,620	1,206	7,874	13	6	8	12	13	15
509	9,356	310	1,922	17	12	6	3	13	11
160	1,066	0	0	8	3	0	0	1	11
274	8,063	1,134	7,711	0	0	0	0	0	0

traction of the railway-terminus; and the population may be fairly estimated to have been in 1854

VII.—Houses, Population, Water-Supply, and Diar

Registration District.	Registration Sub-District.	I.	II. Population.		
		Number of Inhabited Houses in 1851.	Estimated Population in 1849.	1851.	Estimated Population in 1854.
32. WANDSWORTH .	1. Clapham	2,657	15,622	16,290	17,306
	2. Battersea	1,760	9,618	10,560	12,150
	3. Wandsworth	1,522	9,173	9,611	10,306
	4. Putney	918	5,155	5,280	5,473
	5. Streatham	1,419	8,985	9,023	9,081
	Houses supplied in streets in which no death occurred.	—	—	—	—
33. CAMBERWELL .	1. Dulwich	259	1,632	1,632	1,632
	2. Camberwell	2,851	16,932	17,742	18,921
	3. Peckham	3,457	17,809	19,444	22,182
	4. St. George	2,845	14,578	15,849	17,138
	Houses supplied in streets in which no death occurred.	—	—	—	—
34. ROTHERHITHE .	Rotherhithe	2,792	16,949	17,805	19,171
	Houses supplied in streets in which no death occurred.	—	—	—	—
	Not identified	—	—	—	—
	Totals	72,344	463,008	482,435	508,024

aths in the Thirty-one Surrey Sub-districts of London—*continued.*

III. Number of Houses and estimated Number of Persons supplied in 1854 with Water as under;—				IV. Number of Deaths from Diarrhœa in Houses which in 1854 were supplied with Water as under;—					
by the Lambeth Company.		by the Southwark and Vauxhall Company.		by the Lambeth Company.		by the Southwark and Vauxhall Company.		from unknown sources.	
No. of Houses.	Estimated Population.	No. of Houses.	Estimated Population.	1848-9.	1853-4.	1848-9.	1853-4.	1848-9.	1853-4.
22	134	1,106	6,747	1	0	19	22	12	16
46	276	1,046	6,276	0	0	6	33	17	27
15	94	144	907	0	0	0	0	20	35
0	0	13	74	0	0	0	0	18	6
515	3,244	0	0	0	0	0	0	20	14
20	122	719	4,386	0	0	0	0	0	0
4	25	0	0	1	0	0	0	1	1
103	639	1,474	9,139	2	1	42	42	21	23
70	392	971	5,438	0	0	13	15	19	43
971	5,438	767	4,295	6	9	9	21	16	20
687	3,985	793	4,600	0	0	0	0	0	0
0	0	1,909	12,218	0	0	38	57	20	48
0	0	427	2,733	0	0	0	0	0	0
25	165	411	2,712	0	0	0	0	0	0
24,854	171,528	39,726	257,625	442	343	651	898	313	477

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For Her Majesty's Stationery Office.

MEDICAL LICENCES.

RETURN to an Address of the Honourable The House of Commons, dated 14 April 1856 ;—*for*,

"RETURNS from each of the Universities of *Oxford, Cambridge, Dublin, London, Durham, Edinburgh, Glasgow, St. Andrew's,* King's College and Marischal College at *Aberdeen,* and the Queen's University in *Ireland*—

- "Of the Number of Medical and Surgical Degrees granted by it in each Year for the last Ten Years ; distinguishing the Degree of Bachelor of Medicine from the Degree of Doctor of Medicine, and distinguishing those who before obtaining such Degrees had already elsewhere obtained Diplomas or Licences to Practise :
- "Of the Duration of the Period of Professional Study required of the Candidates for the said Degrees :
- "Of the Minimum Age of Candidates for the same :
- "Of the Subjects in which Candidates are examined :
- "Of the Mode of conducting the Examinations, whether *vivâ voce* only, or *vivâ voce* and by written Questions and Answers, and whether by Demonstrations, Dissections, and Clinical Examination :
- "Of the Number of Medical Professors, and the Subjects of the Courses on the different Branches of Medical Study :
- "Whether more than One Examination for each Degree is required ; and, if more than One, with what Interval :
- "Of the Proportion of rejected to successful Candidates for each Degree :
- "Of the Fees exacted for each Degree :
- "Of the Privileges conferred by each Degree :
- "Who are the Examiners in the several Subjects of Examination respectively ; when, for what Period, and by whom appointed :

"From the Colleges of Physicians and the Colleges of Surgeons of *London, Edinburgh,* and *Dublin,* and the Faculty of Physicians and Surgeons of *Glasgow* respectively—

- "Of the Number of Licentiates, Members, and Fellows (distinguishing each Class), admitted each Year for the last Ten Years :
- "Of the Duration of the Period of Professional Study required for Licentiates, Members, and Fellows :
- "Of the Age at which Candidates are eligible for Examination :
- "Of the Subjects of Examination :
- "Whether the Candidate is subjected to more than One Examination ; if to more than One, at what Interval :
- "Of the Mode of conducting the Examinations, whether *vivâ voce* only, or *vivâ voce* and by written Questions and Answers, and whether by Demonstrations, Dissections, and Clinical Examinations :
- "Of the Time generally occupied by the Examination of a Candidate :
- "Of those who, obtaining such Licences or Diplomas, have elsewhere obtained Licences to Practise :
- "Of the Proportion of rejected to successful Candidates :
- "Of the Fees exacted for each Examination :
- "Of the Privileges conferred by the Diploma or Licence :
- "Who are the Examiners in the several Subjects of Examination respectively ; when, for what Period, and by whom appointed :

"And, from the Society of Apothecaries of *London,* and from the Apothecaries' Hall of *Ireland*—

- "Of the Number of Licences to practise granted in each Year for the last Ten Years :
- "Of the Minimum Age at which Candidates are eligible for Licences :
- "Of the duration of the Period of Professional Study required of Candidates :
- "Of the Subjects of Examination :
- "Of the Mode of conducting the Examinations, whether *vivâ voce* or by written Questions and Answers, or both, and whether by Demonstrations, Dissections, and Clinical Examinations :
- "Of the Time generally occupied by the Examination of a Candidate :
- "Of the Privileges conferred by the Licence :
- "Who are the Examiners in the several Subjects of Examination respectively ; when, for what Period, and by whom appointed."

(*Mr. Cowper.*)

Ordered, by The House of Commons, *to be Printed,*
17 *July* 1856.

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RETURNS relating to MEDICAL LICENCES granted by the Universities of *Oxford, Cambridge, Dublin, London, Durham, Edinburgh, Glasgow, St. Andrew's,* King's College, and Marischal College at *Aberdeen,* and Queen's University in *Ireland;* by the Colleges of Physicians, and Colleges of Surgeons of *London, Edinburgh,* and *Dublin,* and Faculty of Physicians and Surgeons of *Glasgow;* and by the Society of Apothecaries of *London,* and the Apothecaries' Hall of *Ireland.*

ENGLAND.

UNIVERSITY OF OXFORD.

Answers to Questions on Medical Degrees and Examinations from the University of Oxford.

1. The University of Oxford does not grant surgical degrees. The power to do so is vested in the statutes of the University, but such power has never been exercised.

She confers two degrees in medicine, viz., those of Bachelor and Doctor in that faculty. The number of degrees granted by the University for the last ten years is as follows:

	MED. BAC.	MED. DOC.
1846	2	2
1847	1	2
1848	–	1
1849	1	–
1850	1	–
1851	1	–
1852	–	1
1853	–	1
1854	3	–
1855	1	–

Candidates for medical degrees are not questioned as to whether they have obtained diplomas or licences to practise elsewhere.

2. 3. 4. 5. For answers to the questions marked 2. 3. 4. 5. reference is made to the following statement, dated 1 August 1840, prepared and issued by the Regius Professor of Medicine and the Medical Examiners of that year. The practice of the present day is still by statute, in accordance with the requirements contained in the statement referred to.

"Oxford, 1 August 1840.

"ACCORDING to the lately altered statute respecting medical degrees, a candidate for the degree of Bachelor in Medicine before he can be admitted to examination for that degree must have kept four whole years, or sixteen terms, in the University, in like manner as is required by candidates for a degree in arts; must have passed the examination for the degree of Bachelor in Arts; and, subsequently to that examination, must have studied medicine during three whole years, or 12 terms; and must also have completed seven years, or 28 terms, from his matriculation.

"In testimony of his having fulfilled the above conditions, he is required to produce his matriculation paper together with the *testamur* of his examination for the degree of Bachelor of Arts, and the requisite medical certificates.

"The medical examination takes place only once in the course of the year, namely, in the second week of full Trinity Term; commencing usually on the second Tuesday after Trinity Sunday.

"The candidate is examined, principally *viva voce,* but partly in writing, in the theory

and practice of medicine, in anatomy, in physiology, pathology, and the materia medica; and also in chemistry and botany, as far as they elucidate the art of medicine.

"The candidate is required to be conversant with the entire works of Aretæus and Celsus; the Aphorisms and Epidemics of Hippocrates; and that portion of Galen's writings entitled 'De usu Partium'; in two at least of which authors the statute directs that the examiners fail not to test the candidate's attainments.

"The candidate must express his intention of being examined to the Regius Professor of Medicine, full 14 days before the day of examination; sending at the same time certificates of three years' attendance on the medical practice of some accredited hospital; and on the usual lectures in anatomy, &c., &c.

"With respect to attendance on lectures, certificates are required for

"Two courses of anatomy and physiology, each course extending through the usual winter session, from October till the following April or May.

"Two courses on the theory and practice of medicine, each course of the same extent as those of anatomy and physiology.

"One course in materia medica.

"One course in botany.

"One course in chemistry, provided the course extend through the usual winter session; otherwise two courses will be required.

"A candidate for the degree of Doctor in Medicine must have pursued the study of medicine during three years after he has graduated as Bachelor in Medicine; and must give, at least, a fortnight's previous notice of his intention to the Professor of Medicine, at the same time submitting to his approbation a subject for a medical dissertation; which dissertation must be read in the public schools of the University within a few days of taking the degree of M. D., and a fair copy of it be delivered to the Professor immediately after it has been read.

"No graduate in medicine from another University can be incorporated at Oxford, unless he produce testimonials by which it may clearly appear that he has kept by residence terms equal to those required to be so kept in this University; has completed all the exercises prescribed by the University from which he migrates for the degree of Bachelor of Arts; and shall have previously undergone the medical examination above described; and shall have fulfilled all the other conditions of the present statute."

6. The professors of the University of Oxford, whose lectures treat of the different branches of medical study are—

   The Regius Professor of Medicine, Clinical Professor of Medicine, Aldrichian Professor of Anatomy, Lee's Reader in Anatomy, Aldrichian Professor of Chemistry, Professor of Botany,

   who give courses in their different branches each term.

7. One examination only is required for the degree of Bachelor in Medicine, continued from day to day, as occasion may require. For the degree of Doctor in the Faculty no examination is required; but the Regius Professor of Medicine has to be satisfied by written treatise of the fitness of the candidate.

8. There is no publication in the University of Oxford of candidates rejected; but it is known as a fact that such cases have occurred.

9. The fees for admission to the Med. Bac. degree are 14*l.*, as also an examination and presentation fee of 10*l.*; but this is not paid by rejected candidates. The fees for admission to the Med. Doc. are 40*l.*

10. The privileges conferred by admission to the Med. Bac. degree are a licence to practise "*per universum Angliæ regnum*;" and admission to the degree of Master of Arts at reduced fees. Those conferred by admission to the Med. Doc. are membership of Convocation, and if resident within 1½ mile of Carfax Church, membership of congregation.

11. The examiners for medical examinations are the Regius Professor of Medicine, *ex officio*, and two Doctors of the University of Oxford, in the faculty of medicine, annually nominated by the Vice-Chancellor, subsequently to be approved by Convocation.

University of Cambridge.

Return from the University of Cambridge respecting Medical Degrees.

The subjoined Table represents the Number of Medical Degrees conferred in the University of Cambridge in the Years 1846—1855, inclusive.

Academical Year, ending Commencement	Bachelors of Medicine.	Licentiates in Medicine.	Doctors of Medicine.	Total of Degrees.
1846	5	-	-	5
1847	3	-	4	7
1848	1	-	5	6
1849	7	1	2	10
1850	3	1	-	4
1851	3	3	4	10
1852	1	2	2	5
1853	1	1	1	3
1854	2	2	4	8
1855	1	1	1	3
Total	27	11	23	61

No record exists to show how many of the above had already obtained elsewhere diplomas or licences to practise; but it sometimes happens that medical graduates of Edinburgh become undergraduates at Cambridge, with a view of graduating in medicine at an English University, an instance of which occurred last year.

Bachelors of Medicine.

Candidates for the M. B. degree, who must have entered on their sixth year, computed from their first admission at the University, and have resided nine terms, are required to have been employed two years in professional study, and during the same period to have attended hospital practice.

The minimum age of candidates for the M. B. degree is not fixed, but they are generally 24 or 25 years of age at the time of taking that degree.

They are examined in chemistry, botany, materia medica, physiology, and pathology; also in Celsus and Hippocrates. They likewise keep an act in the public schools.

Licentiates in Medicine.

The candidate for the licence to practise, if previously a bachelor of medicine, must have attended hospital practice for three years; if not previously a bachelor of medicine, he must have been employed five years in the study of medicine, and have attended hospital practice three of the said five years.

All candidates for the licence to practise are examined in anatomy and physiology, in pathology and the practice of medicine, surgery, midwifery, and medical jurisprudence; also in Aretæus. They are likewise examined clinically in the wards of the hospital.

No minimum age is fixed for the licentiate, but practically they are never under 26 years of age.

Doctors of Medicine.

The candidate for the M. D. degree, if not previously a licentiate in medicine of the University, is required to have been employed for the same period in professional study and attendance on hospital practice, and to pass the same examinations as the candidates for the licence. All candidates for the doctorate also keep an act in the public schools.

The degree of M. D. is granted to a bachelor of medicine of five years, or a master of arts of seven years' standing.

The Mode of Conducting the Examinations.

The examinations are for the most part by written questions and answers; but it is at the option of the examiner to add a *vivâ voce* examination, which is sometimes practised.

In the clinical examination, certain patients, recently admitted into the hospital, are selected by the examiner and submitted to the candidate, who is required to investigate the cases of such patients by himself, and to draw up a written statement, comprising the history,

tory, present symptoms, diagnosis, prognosis, and the treatment he recommends to be adopted in each case respectively.

The act kept in the public schools by the candidates for the M. B. or M. D. degree consists in reading a Latin thesis on some fixed professional subject, scientific or practical. The candidate has then to maintain the subject of his thesis formally in answer to syllogistic arguments brought against it. The presiding professor afterwards examines him *vivâ voce* on points relating to the same subject, which concludes the exercise. The whole is conducted in the Latin tongue.

Medical Professors.

Regius Professor of Physic.
Professor of Anatomy.
Downing Professor of Medicine.
The Linacre Lecturer.
Professor of Chemistry.
Professor of Botany.

The above, with the exception of the Linacre lecturer, are all *ex-officio* examiners of the candidates for medical degrees.

The Subjects of the Courses.

Comparative Anatomy.
Human Anatomy and Physiology.
Pathology and the Practice of Medicine.
Clinical Lectures, Medical and Surgical.
Chemistry.
Botany.
Materia Medica.
Surgery.

Short courses on the two last subjects are delivered; the former by the Downing Professor of Medicine, and the latter by one of the surgeons of the hospital. Increased facilities have recently been afforded the students of instruction in practical anatomy by dissections.

Number of Examinations for each Degree.

The candidate for the M. B. degree may be examined in all the subjects at the same period, but he has the option, of which he usually avails himself, of being examined in chemistry and botany a year earlier.

Proportion of Rejected to Successful Candidates.

No record is kept of rejected candidates, but the following statement may be depended on. During the last 10 years the proportion of rejected candidates for the M. B. degree has been one in nine, and for the licence, one in 11. There have been no rejections among the candidates for the M. D. degree during the last 10 years.

The Fees for each Degree.

	£.	*s.*	*d.*
Bachelor of Medicine - - - - -	10	16	–
Licentiate in Medicine - - - - -	11	6	–
Doctor of Medicine - - - - - -	15	2	–

The above does not include the college fees, nor the fees to the Professor for acts in the public schools. The fee for the M. B.'s act in the schools is 7 *l.*, and for the M. D.'s act, 11 *l.* 11 *s.*

Privileges conferred by each Degree.

No privilege as to practice or membership of the senate is conferred by the M. B. degree. The licence to practise confers the right to practise as a physician anywhere except in the metropolis, and seven miles around it; but the licentiate is not a member of the senate, unless previously a master of arts.

The diploma granted to the Doctor of Medicine confers the same privilege as to practice as the licence. The M. D. when he has completed his degree by creation at the commencement becomes a member of the senate.

The Examiners and their Mode of Appointment.

The Regius Professor of Physic examines in Pathology and the Practice of Medicine, in the Medical Classics, and in Clinical Medicine, and presides at the exercises in the public schools.

The Professor of Anatomy examines in Anatomy and Physiology.

The Downing Professor of Medicine examines in Materia Medica and Therapeutics.

The Professor of Chemistry in Chemistry.

The Professor of Botany in Botany.

The above are *ex-officio* examiners.

With

With these are associated other examiners appointed annually by grace of the senate' viz.:

One additional examiner of the candidates for the M. B. degree, who may examine in one or all of the subjects required of the candidates for that degree. The present custom, on the recommendation of the Board of Medical Studies,* is for the additional examiner to set a general paper comprising questions in all the subjects with the exception of chemistry, botany, and the medical classics.

One additional examiner of the candidates for the licence and the M. D. degree, who is at liberty to satisfy himself by clinical examination, or otherwise, of the professional qualifications of the candidate for practice, and likewise assist the Downing Professor of Medicine in some of the special subjects of examination, as Surgery, Midwifery, and Medical Jurisprudence.

(signed) *James Cartmell,*
Deputy Vice-Chancellor.

University of London.

Number of Medical Degrees granted by the University in each of the last Ten Years.

Bachelor of Medicine.		Doctor of Medicine.	
In 1846	13	In 1846	11
1847	20	1847	9
1848	20	1848	11
1849	13	1849	8
1850	12	1850	13
1851	19	1851	8
1852	13	1852	10
1853	10	1853	8
1854	12	1854	5
1855	14	1855	12
Total	146	Total	95

Of the bachelors of medicine 113 had already elsewhere obtained diplomas or licences to practise.

Duration of Period of Professional Study.

For Bachelor of Medicine:—Not less than four years after having passed the Matriculation examination.

For Doctor of Medicine:—From one to five years after having obtained the degree of bachelor of medicine, according to the candidate's position at the M. B. examination, or the length of time he has been engaged in the practice of his profession.

Age of Candidates.

For Bachelor of Medicine:—Minimum, 21; average, 25.

For Doctor of Medicine:—Minimum, 22; average, 28.

Subjects in which Candidates are Examined.

For the degree of Bachelor of Medicine:—

At Matriculation:—Mathematics; natural philosophy; chemistry; classics, including the Greek and Latin languages; the English language; outlines of history and geography, and either the French or German language.

At the First Examination:—Anatomy; physiology; chemistry; botany materia medica, and pharmacy.

At

* Recently established by Grace of Senate.

At the Second Examination:—Physiology and comparative anatomy; general pathology; general therapeutics and hygiene; surgery; medicine; midwifery; forensic medicine; practical examinations in medicine and surgery on patients at a hospital, with written reports on their cases.

There are additional and voluntary examinations for honours in all the above subjects.

For the degree of Doctor of Medicine:—

Elements of intellectual philosophy, logic, and moral philosophy; medicine; a written commentary on a case in medicine, surgery, or midwifery; practical examinations on patients in a hospital, with written reports on their cases.

Mode of conducting the Examinations.

By printed questions and written answers, and *vivâ voce* interrogation, on each of the above-mentioned subjects, and by demonstrations, dissections, and clinical examination at a hospital, on the subjects which admit of such practical examinations.

Number of Medical Professors.

There are no professors at the University itself (instruction not being carried on thereat). At University College, London, there are 14 professors; at King's College, London, 11. The number of professors at the other medical schools in connexion with the University (which comprise all the principal medical institutions in the United Kingdom) varies in different institutions.

Number of Examinations.

For the degree of Bachelor of Medicine:—Two examinations, subsequently to matriculation, with an interval of two years between them.

For the degree of Doctor of Medicine:—One examination in addition to the examinations for the M.B. degree after an interval of from one to five years.

Proportion of rejected to Successful Candidates.

BACHELOR OF MEDICINE.							DOCTOR OF MEDICINE.			
First Examination.				Second Examination.						
Year.	Number of Candidates.	Passed.	Rejected.	Number of Candidates.	Passed.	Rejected.	Year.	Number of Candidates.	Passed.	Rejected.
1846	31	26	5	14	13	1	1846	13	11	2
1847	33	24	9	21	20	1	1847	9	9	–
1848	41	27	14	24	20	4	1848	12	11	1
1849	32	25	7	17	13	4	1849	9	8	1
1850	31	23	8	18	12	6	1850	16	13	3
1851	34	27	7	21	19	2	1851	9	8	1
1852	27	21	6	14	13	1	1852	11	10	1
1853	30	23	7	17	10	7	1853	8	8	–
1854	30	28	2	17	12	5	1854	5	5	–
1855	36	30	6	18	14	4	1855	12	12	–
	325	254	71	181	146	35		104	95	9

Fees.

For Matriculation, 2 *l.*

For Bachelor of Medicine, first examination, 5 *l.*, second examination, 5 *l.*; total, 10 *l.*

For Doctor of Medicine, 10 *l.*

Privileges conferred by each Degree.

Until the year 1854, the degrees of the University of London conferred no privilege. The 17 & 18 Vict. c. 194, conferred on the possessors of either degree licence to practise medicine in any part of the United Kingdom, except London, and within seven miles of it.

The

The present Examiners, with the Subjects in which they examine.

Rev. Professor Heaviside, M.A. } examiners in mathematics and natural philosophy.
G. B. Jerrard, Esq., B.A. -}
R. Dundas Thompson, Esq., M.D., examiner in chemistry (in arts).
Thos. B. Burcham, Esq., M.A. } examiners in classics.
William Smith, Esq., LL.D. }
C. J. Delille, Esq., examiner in the French language.
Rev. A. Walbaum, examiner in the German language.
Dr. Billing, } examiners in the practice of medicine.
Dr. Tweedie, }
Sir Stephen L. Hammick, Bart. } examiners in surgery.
Joseph Hodgson, Esq., F.R.S. -}
Francis Kierman, Esq., F.R.S. } examiners in anatomy and physiology.
Professor Sharpey, M.D., F.R.S. }
Professor Carpenter, M.D., F.R.S., examiner in physiology and comparative anatomy.
Dr. Rigby, examiner in midwifery.
Professor Brande, F.R.S., examiner in chemistry (in medicine).
Rev. Professor Henslow, examiner in botany.
Dr. Owen Rees, examiner in materia medica and pharmacy.
Rev. Henry Alford, B.D. } examiners in intellectual philosophy.
T. B. Burcham, Esq., M.A. }

The examiners are elected by the senate, partly from among themselves, and partly from among candidates for the office who are not members of the senate. They are appointed for one year only, but each examiner is eligible for re-election.

3 May 1856.

University of Durham.

1. Number of Medical and Surgical Degrees granted by it in each year for the last 10 years; distinguishing the Degree of Bachelor of Medicine from the Degree of Doctor of Medicine, and distinguishing those who before obtaining such Degrees had already elsewhere obtained Diplomas or Licences to Practise.

1852. Easter Term.—Doctor of Medicine by Diploma.

Thomas Emerson Headlam, M.D., President of the College of Medicine at Newcastle, in connexion with the university, and practising as a physician in Newcastle.

1853. Easter Term.—Doctor of Medicine by Diploma.

Dennis Embleton, M.D., Reader in Medicine in the University of Durham, and Lecturer in Anatomy in the College of Medicine at Newcastle, in connexion with the University of Durham, practising as a physician in Newcastle.

1855. Easter Term.—Doctor of Medicine by Diploma.

Edward Charlton, M.D., Lecturer in the Principles and Practice of Physic in the Newcastle-on-Tyne College of Medicine, in connexion with the University of Durham, and practising as a physician in Newcastle.

Thomas Humble, M.D., Lecturer in Materia Medica and Therapeutics in the same College, practising as a physician in Newcastle.

Thomas Michael Greenhow, Fellow of the Royal College of Surgeons, Lecturer in Medical Ethics in the Newcastle-on-Tyne College of Medicine, in connexion with the university, practising in Newcastle.

1856. Epiphany Term.—Doctor of Medicine by Diploma.

William Green, Fellow of the Royal College of Surgeons, practising in Durham.

The above-mentioned degrees were conferred upon Dr. Headlam, Dr. Embleton, Dr. Charlton, Dr. Humble and Mr. Greenhow, in consequence of a connexion formed in 1852 between the University of Durham and a Medical School at Newcastle-upon-Tyne, a connexion which will explain also some of the subsequent returns.

This connexion arose out of an application made to the University of Durham in the year 1850, to give its aid to a medical school already established at Newcastle.

A negotiation was in consequence opened between the two bodies, but was shortly after suspended, on account of differences which unfortunately occurred among the officers of the medical school at Newcastle.

When, however, the principal medical practitioners who had been in correspondence with the university had reorganised the school, and had been recognised by the Royal College of

Surgeons in London, and by the Worshipful Society of Apothecaries in London, they renewed their application, and the connexion was formed, which still exists, between the University and the College of Medicine at Newcastle.

This connexion led to the conferring of the above-mentioned degrees on some of the chief officers of the College of Medicine; and moreover one of those officers has been appointed Reader in Medicine, and another Lecturer in Chemistry, in the University of Durham.

Provision having been made for an efficient course of medical instruction at Newcastle, regulations for proceeding to medical degrees were drawn up with reference to this course.

2. Duration of the Period of Professional Study required of the Candidates for the said Degrees.

Candidates for a licence in medicine are required to reside one academical year at Durham, and three subsequent academical years either in the University of Durham or in a medical school in connexion with the university. They must also produce satisfactory testimonials of conduct, and certificates of having attended such medical lectures and hospital practice as the warden and senate shall require. For the degree of Bachelor of Medicine, the candidate must be a licentiate of medicine, and of the standing of 21 terms, or seven academical years, from the date of his matriculation. For the degree of Doctor of Medicine, he must be a Bachelor of Medicine of the standing of 30 terms, or 10 academical years, from the date of his matriculation.

3. Minimum Age of Candidates for the same.

According to the regulations previously mentioned, the age of persons admitted to degrees will depend on their age at matriculation. If matriculated at the age of 16, a student must be of the age of 23 years at least for admission to the degree of Bachelor of Medicine, and of the age of 26 years at least for admission to the degree of Doctor of Medicine.

4. Subjects in which Candidates are examined.

The subjects for students in medicine at the end of the first year are fixed every year by the warden and senate.

The following are the subjects for 1856:—
The first two books of Euclid.
Arithmetic.
The elements of mechanics, hydrostatics, optics, acoustics and chemistry.
Virgil, Æneid, iv, v.
Homer, Iliad, ii.
The French and German languages.
Scripture History and the subject matter of some one Gospel.

The following are the subjects of examination for a licence in medicine in June 1856:—

First day, at Newcastle:
Practical examination in anatomy, chemistry, and surgery.
Cases of disease.

Second day, at Durham:
Written answers to papers.
Materia medica, chemistry, botany, medical jurisprudence, anatomy and physiology.

Third day, at Durham:
Written answers to papers.
Principles and practice of medicine, and of surgery and midwifery.

Fourth day, at Durham:
Vivâ voce examination, at the discretion of the examiners.

5. Mode of conducting the Examinations, whether *vivâ voce* only, or *vivâ voce* and by written Questions and Answers, and whether by Demonstrations, Dissections, and Clinical Examination.

This question is partly answered under the preceding head.

The earliest period at which students admitted under the regulations will be of sufficient standing to present themselves for the examination for a licence in medicine, will be in June 1856.

In anatomy it is contemplated to make a candidate dissect a portion of the human body, so as to afford him an opportunity of showing his practical skill in dissection, as well as his knowledge of the parts.

In surgery to make him perform an operation on the subject; in chemistry, to present him with a substance for analysis, to be conducted in the laboratory.

6. Number

6. Number of Medical Professors, and the Subjects of the Courses on the different branches of Medical Study.

In the University of Durham there are three officers, whose lectures bear on medical study, the Reader of Medicine, the Reader in Natural Philosophy, and the Lecturer in Chemistry.

But it is contemplated that the principal part of the peculiarly medical education should be conducted in the Medical College at Newcastle, or at some other medical school in connexion with the university.

In Newcastle the number of lecturers is 18, and the lectures are thus arranged:

Anatomy and Physiology.

D. Embleton, M.D., F.R.C.S.
C. J. Gibb, M.R.C.S.
R. H. Wilson, M.R.C.S.

Surgical Anatomy and Demonstrations.

J. C. Penny, M.B., M.R.C.S.

Pathological Anatomy.

S. Fenwick, M.D., M.R.C.S.
C. J. Gibb, M.R.C.S.

Principles and Practice of Physic.

E. Charlton, M.D.
D. Embleton, M.D.

Mental Diseases.

D. Macintosh, M.D.

Principles and Practice of Surgery.

H. Heath, F.R.C.S.
G. Y. Heath, M.B., M.R.C.S.

Operative Surgery.

G. Y. Heath, M.B., M.R.C.S.

Midwifery and Diseases of Women and Children.

Sam. M. Frost, M.R.C.S.
C. Gilson, M.D.

Materia Medica and Therapeutics.

T. Humble, M.D.

Principles and Practice of Chemistry.

T. Richardson, PH.D.

Botany and Vegetable Physiology.

John Thornhill.
D. Oliver, jun., F.L.S.

Medical Jurisprudence.

W. Robinson, M.R.C.S.
W. Chater.

Medical Ethics.

T. M. Greenhow, M.D., M.R.C.S.

7. Whether more than one Examination for each Degree is required; and if more than one, at what interval.

Two examinations are required for a licence in medicine; one at the end of the first academical year, relating to the rudiments of religion, literature, and science; the second at the end of the fourth academical year, devoted exclusively to the medical sciences.

The exercises for the degrees of bachelor of medicine and doctor of medicine are left to the appointment of the warden and senate.

8. Proportion of rejected Candidates to successful Candidates for each Degree.

It has already been stated under Question 5, that no examination has yet taken place for a licence in medicine, the first students admitted under the regulations not being of sufficient standing till June 1856, when the first examination for a licence in medicine will be held.

9. Fees exacted for each Degree.

For a licence in medicine - - - -	£.3 - -
For the degree of M.B. - - - -	6 - -
For the degree of M.D. - - - -	6 - -

10. Privileges conferred by each Degree.

The licence in medicine enables the licentiate to become a candidate for the degree of bachelor of medicine and doctor of medicine.

The degrees of bachelor of medicine and doctor of medicine confer, it is presumed, the same privileges as the same degrees in other universities of the United Kingdom.

11. Who are the Examiners in the several Subjects of Examination respectively, when, for what Period, and by whom appointed?

For the examination at the end of the first year there must be two examiners at least, nominated annually by the warden, and approved by convocation.

For the examination at the end of the fourth year there must be three examiners at least, nominated by the warden, and approved by convocation.

University College, Durham,
23 April 1856.

Cha. Thorp,
Warden of the University of Durham.

College of Physicians, London.

1. Number of Licentiates, Members, and Fellows (distinguishing each class) admitted each year for the last Ten Years.

	1846.	1847.	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.
Licentiates - -	12	10	5	13	16	11	12	15	16	14
Extra Licentiates -	8	4	4	4	5	5	7	5	7	8
Fellows - -	3	5	7	7	6	5	9	4	6	9

2. Duration of the period of Professional Study required for Licentiates, Members, and Fellows.

Every candidate for examination must produce proofs that he has pursued his professional studies during five years, including three years of attendance on the physician's practice of a general hospital containing not less than 100 beds.

3. Of the Age at which Candidates are eligible for Examination.

Twenty-six.

4. Subjects of Examination.

Nemo in permissorum numerum admittatur qui non prius examinatus et approbatus fuerit in tribus comitiis minoribus, secundum hanc formam:

Unusquisque eorum qui in numerum permissorum admitti petat, examinetur:—

In primis comitiis, in parte medicinæ physiologicâ.

In secundis, in parte pathologicâ.

In tertiis, in parte therapeuticâ.

Ineunte examinatione primâ, interroget examinandum præsidens vel propræsidens ubinam bonas literas et scientiarum principia didicerit? quibus in academiis commoratus sit? et quibus denique honoribus gradibusve, sive ad philosophiam et disciplinas humaniores, sive ad medicinam ipsam pertinentibus decoretur.

Hisce quæstionibus responsa, ut literis illicò mandentur, et inter annales nostros conserventur, curet registrarius.

Præterea examinetur in Græcis literis ad medicinam spectantibus, scilicet in Hippocrate, vel Galeno, vel Aretæo. Proponantur unicuique in primâ examinatione loci ex Aphorismis Hippocratis, vel e Galeno; in secundâ et tertiâ examinatione loci ex Hippocrate, vel Galeno, vel Aretæo, qui Latinè reddantur, et brevi commentario illustrentur. Si quis autem in Græcis literis parùm profecisse videatur, is saltèm e Celsi vel Sydenhami operibus, vel quovis alio libro Latino ad medicinam spectante, locum Anglicè reddat.

Singulæ examinationes prædictæ Latinè fiant, et Anglicè etiam, si quando id visum fuerit censoribus.

5. Whether

5. Whether the Candidate is subjected to more than one Examination; if more than one, at what interval?

A candidate must pass three examinations on paper on three successive days; also, three *vivâ voce* examinations on three following days.

6. Mode of conducting the Examinations, whether *vivâ voce* only, or *vivâ voce* and by written Questions and Answers; and whether by Demonstrations, Dissections, and Clinical Examinations?

Vide answers to questions 4 and 5.

7. Time generally occupied by the Examination of a Candidate.

Candidates are allowed six hours each day to answer the written questions and translate Greek and Latin. Each *vivâ voce* examination occupies from half an hour to an hour, or longer if necessary; and any Fellow of the College may be present during the time.

8. Of those who, obtaining such Licences or Diplomas, have elsewhere obtained Licences to Practise.

Candidates from Oxford and Cambridge, and now also those from the London University, have generally licences to practise through England, but not in London.

9. Proportion of rejected to successful Candidates.

From 1845 to 1855:

Licentiates:	Successful	124
	Rejected	17
Extra Licentiates:	Successful	57
	Rejected	13

10. Fees exacted for each Examination.

Licentiates: Fees if successful, 41 *l.* 17 *s.*; stamp, 15 *l.*
„ rejected - - Nil.

Fellows: Fees, 30 *l.* 1 *s.*; stamp, 25 *l.*

Extra Licentiates: Successful, fee for examination, 13 *l.* 17 *s.*
Letters testimonial, 10 *l.*

Rejected, fees for examination, 13 *l.* 17 *s.*

11. Privileges conferred by Diploma or Licence.

By 14 & 15 Hen. 8, c. 5, no person shall practise physic in London, or seven miles thereof, unless he be admitted thereto by a licence under the common seal of the President and College of Physicians, or he shall be subject to a penalty of 5 *l.* per month. And, by the same statute, no person shall practise physic through England until such time as he be examined at London by the president and three elects of the College of Physicians, and have from them letters testimonial, except he be a graduate of Oxford or Cambridge.

12. Who are the Examiners in the several Subjects of Examination respectively; when, for what period, and by whom appointed?

For licences, the examiners are the president and four censors of the College of Physicians, chosen annually by the College. For extra licences, the president and three of the elects.

Francis Hawkins, M.D.,
14 April 1856. Registrar.

Royal College of Surgeons of England.

Returns of the Number of Licentiates, Members, and Fellows (distinguishing each Class) admitted each Year, for the last Ten Years, and of the Proportion of Rejected to Successful Candidates.

Members Admitted:

In 1846, admitted on examination									389	Candidates rejected											53
1847	-	-	ditto	-	-	-			384	-	-	ditto	-	-	-	-	-				43
1848	-	-	ditto	-	-	-			341	-	-	ditto	-	-	-	-	-				66
1849	-	-	ditto	-	-	-			377	-	-	ditto	-	-	-	-	-				46
1850	-	-	ditto	-	-	-			383	-	-	ditto	-	-	-	-	-				51
1851	-	-	ditto	-	-	-			385	-	-	ditto	-	-	-	-	-				47
1852	-	-	ditto	-	-	-			407	-	-	ditto	-	-	-	-	-				40
1853	-	-	ditto	-	-	-			414	-	-	ditto	-	-	-	-	-				73
1854	-	-	ditto	-	-	-			432	-	-	ditto	-	-	-	-	-				105
1855	-	-	ditto	-	-	-			547	-	-	ditto	-	-	-	-	-				70

Members Admitted *ad eundem gradum:*

In the Year 1852	10
„ 1853	4
„ 1854	6
„ 1855	3

Fellows Admitted:

In 1846, admitted on examination	17	Candidates rejected	1
1847 - - ditto	18	- - ditto	5
1848 - - ditto	10	- - ditto	10
1849 - - ditto	38	- - ditto	1
1850 - - ditto	12	- - ditto	5
1851 - - ditto	12	- - ditto	4
1852 - - ditto	14	- - ditto	2
„ admitted by election	184		
1853 - ditto - on examination	8	- - ditto	2
„ - ditto - by election	94		
1854 - ditto - on examination	12	- - ditto	3
„ - ditto - by election	80		
1855 - ditto - on examination	5	- - ditto	3
„ - ditto - by election	55		

Licentiates in Midwifery:

In 1852, found qualified on examination,	20	Candidates rejected	1
1853 - - - ditto	104	- - ditto	4
1854 - - - ditto	78	- - ditto	8
1855 - - - ditto	92	- - ditto	5

RETURNS of the Subjects of Examination: Whether the Candidate is subjected to more than one Examination; if to more than one, at what interval; of the Mode of conducting the Examination, whether *vivâ voce* only, or *vivâ voce* and by written Questions and Answers, and whether by Demonstrations, Dissections, and Clinical Examinations; and of the Time generally occupied by the Examination of a Candidate.

Candidates for the diploma of Member of the College are examined in anatomy, physiology, pathology, and surgery. The examination is *vivâ voce*, and occupies at least one hour; but should the Court not be satisfied with the answers to the *vivâ voce* examination, the candidate is required to attend the next meeting of the Court, and to give written answers to written questions, and for which purpose from three to four hours are allowed.

The examination of candidates for the Fellowship is in anatomy, physiology, pathology, therapeutics, and surgery, and is conducted by written answers to written questions, for which six hours on each of two separate days are allowed; the senior candidates (those who have been members of the college for the period of eight years) are also required to perform a surgical operation in the presence of the members of the Court of Examiners, and the others, or junior candidates, are required on a third day to perform such dissection as shall be directed by the Court. The junior candidates are also required to pass a preliminary examination in classics, mathematics, and French, at any time before presenting themselves for the professional examination.

The examination for the Licence in Midwifery, in the case of members of the college, is in practical midwifery and the diseases of women and children, and is conducted in the same manner as the examination for the membership, and occupies somewhat less than one hour. In the case of persons not members of this or any other College of Surgeons, the examination is more general.

28 April 1856. *Edm. Belfour,* Secretary.

RETURNS of those who, obtaining such Licences or Diplomas, have elsewhere obtained Licences to Practice; of the Fees exacted for each Examination; and of the Privileges conferred by the Diploma or Licence.

As no separate record is kept of persons obtaining the diploma of this college who have elsewhere obtained licences to practise, no return can be made to this order.

The fee paid upon admission to the membership of the college is 20 guineas over and besides the stamp duty.

The fee paid upon the admission of a member to the fellowship of the college is 10 guineas, and the fee paid by every person not previously a member, is 30 guineas, both fees over and besides all charges for stamps.

The

The fee paid by a person on his admission to the preliminary examination for the fellowship in classics, mathematics, and French is 10 guineas, which sum is allowed on the candidate's admission to the fellowship.

The fee for the licence in midwifery is as follows, viz.: persons who were fellows or members of this college prior to the 1st of January 1853, two guineas; persons admitted fellows or members of this college subsequently to the 1st of January 1853, three guineas; persons producing any other diploma or certificate of degree which may be considered by the council to afford satisfactory proof of sufficient surgical and medical education, three guineas.

All other persons, 10 guineas.

The privileges conferred by the diploma of membership are the right to practise surgery in all parts of Her Majesty's dominions; to hold all offices in which the services of a legally qualified surgeon are required; exemption from the several offices of constable, scavenger, overseer of the poor, and all other parish, ward, or leet offices, and from serving upon juries or inquests, and of admission to the museum, library, and theatre of the college.

The privileges conferred by the diploma of fellowship is the right of voting at elections of members of council, and eligibility to the council and court of examiners of the college.

28 April 1856. *Edm. Belfour*, Secretary.

RETURN of who are the Examiners in the several Subjects of Examination respectively; When, for what Period, and by whom Appointed.

The following are the Members of the Court of Examiners:—

NAME.	RESIDENCE.	ELECTED.
George James Guthree - -	Berkeley-street - - -	3 August 1828.
William Lawrence - - -	Whitehall-place - - -	24 November 1840.
Benjamin Travers - - -	Green-street - - - -	3 March 1841.
Edward Stanley - - -	Brook-street - - - -	4 October 1844.
Joseph Henry Green - -	Hadley - - - -	9 March 1846.
James Moncrieff Arnott - -	New Burlington-street - -	4 January 1848.
John Flint South - - -	Blackheath Park - - -	11 January 1849.
Cæsar Henry Hawkins - -	Grosvenor-street - - -	13 December 1849.
James Luke - - - -	Broad-street Buildings - -	22 May 1851.
Frederick Carpenter Skey -	Grosvenor-street - - -	11 October 1855.

Mr. Guthree, Mr. Lawrence, and Mr. Travers were elected for life; Mr. Stanley, Mr. Green, Mr. Arnott, Mr. South, Mr. Hawkins, and Mr. Luke were elected during the pleasure of the council; Mr. Skey was elected for the period of five years. The election is by the council of the college.

The following are the Examiners in Midwifery:

Dr. Arthur Farre, Hertford-street, May Fair.
Dr. Henry Oldham, Finsbury-square.
Dr. Charles West, Wimpole-street.

Elected by the council of the college on the 11th of July 1855, for the period of one year.

Mr. Travers was appointed Chairman of the Board on the said 11th of July 1855, for the period of one year.

The following are the Examiners of the Junior Candidates for the Fellowship in Classics, Mathematics, and French, viz.:

Goldwin Smith, University College, Oxford.
Professor George Gabriel Stokes, Pembroke College, Cambridge.
Professor Isidore Brasseur, King's College, London.

Appointed by the council of the college on the 10th of January 1856, for the period of one year.

28 April 1856. *Edm. Belfour*, Secretary.

RETURN of the Duration of the Period of Professional Study required for Licentiates, Members and Fellows, and of the Age at which Candidates are eligible for Examination.

Candidates for the diploma of member of the College are required to produce the following certificates, viz.:

Of being 21 years of age.

Of having been engaged during four years in the acquirement of professional knowledge.

Of having studied practical pharmacy during six months.

Of having studied anatomy and physiology by attendance on lectures and demonstrations, and by dissections during three winter sessions.

Of having attended, during two winter sessions, lectures on the principles and practice of surgery.

Of having attended, during one summer session, lectures on materia medica and lectures on midwifery; practical midwifery to be attended at any time after the conclusion of the session.

Of having attended at least one course of lectures on the practice of physic, and one course on chemistry.

Of having attended at a recognised hospital or hospitals in the United Kingdom, the practice of physic, during one winter and one summer session.

And of having attended during three winter and two summer sessions the practice of surgery at a recognised hospital or hospitals in the United Kingdom.

And of having attended clinical lectures on medicine and surgery, in conformity with the following regulations of the Council.

The certificates of attendance on the medical practice of an hospital, commencing on or after the 1st of October 1854, must be accompanied by certificates of attendance on clinical lectures on medicine during such attendance; and the certificates of attendance on the surgical practice of an hospital commencing on or after the said 1st of October 1854, must be accompanied by certificates of attendance on clinical lectures on surgery during such attendance.

Such courses of clinical lectures shall, in England and in the Colonies, consist of not less than one lecture on medicine, and one lecture on surgery in each week during the summer and winter sessions, and in Scotland and Ireland shall consist of such number of lectures as may be respectively required by the Royal Colleges of Surgeons of Edinburgh and Ireland.

These lectures shall be additional to clinical instruction given in the wards, and shall have especial reference to cases at the time, or previously under observation in the hospital.

Those candidates who shall have studied in Scotland are required to bring certificates of having attended lectures on the Institutes of Medicine during one winter session, and on anatomy during two other winter sessions, and on demonstrations and dissection during three winter sessions. Candidates who shall have attended lectures on materia medica in the University of Dublin, will be allowed to bring certificates of such attendance during the winter session.

II. Members or licentiates of any legally constituted College of Surgeons in the United Kingdom, and graduates in surgery of any University requiring residence to obtain degrees, will be admitted for examination on producing their diploma, licence, or degree, together with proof of being 21 years of age, and of having been occupied at least four years in the acquirement of professional knowledge.

III. Graduates in medicine of any legally constituted College or University requiring residence to obtain degrees, will be admitted for examination on adducing, together with their diploma or degree, proof of having completed the anatomical and surgical education required by the foregoing regulations, either at the school and hospital of the University where they shall have graduated, or at one or more of the recognised schools and hospitals in the United Kingdom.

IV. Candidates who shall have attended at recognised colonial hospitals and schools, the medical and surgical practice, and the several courses of lectures, with the demonstrations and dissections required by the foregoing regulations, will be admitted for examination upon producing certificates of such attendance, together with certificates of having attended in London, during one winter session, the surgical practice of a recognised hospital, and lectures on anatomy, physiology and surgery, with demonstrations and dissections.

The following are the subjects of the preliminary examination of the candidates for the fellowship of this College during the year 1856, viz.:

Classics.

Plato, Apologia Socratis.
Homer, Iliad, Book XXIV.
Tacitus, Agricola.
Horace, Odes, Books II., III.

Each candidate is required to bring up one of the above Greek, and one of the above Latin Authors; one prose writer, and one poet.

Mathematics.

Mathematics.

Arithmetic.
Algebra, as far as to include the doctrine of proportion; and simple equations with one or two unknown quantities.
Euclid, Books 1, 2, and 3.
Statics, hydrostatics, optics and acoustics.

Mathematical demonstrations will be required of the elementary propositions in the first two of the latter subjects, such as may be found in any of the following books:

Barrett's Propositions in Mechanics and Hydrostatics.
Snowball's Cambridge Course of Elementary Natural Philosophy.
Whewell's Mechanical Euclid.
Williams's Elements of Mechanics and Hydrostatics.

In the last two it will be sufficient to be prepared with general explanations of the leading phænomena, such as may be found in treatises on Physics.

French.

The translation into English of a passage in two of the following works, at the option of the candidate:

Boileau's Art Poétique.
La Bruyère's Caractères.
Barante's Litterature Française, au 18me siècle.

To which examination candidates are admitted upon having completed the 18th year of their age.

Admission to the Fellowship by Examination.

I. Every candidate, except in the cases and instances hereinafter provided for, is required to produce the following certificates, viz.:

1. That he is 25 years of age.

2. That he is (if found qualified upon his examination) a fit and proper person to be admitted to the fellowship, and the certificate of which shall be signed by three fellows.

3. That he has passed the preliminary examination in Classics, Mathematics and French, appointed by the council.

4. That he has been engaged for six years in the acquirement of professional knowledge in hospitals or schools of anatomy, surgery and medicine recognised by the Council of the College for that purpose; and that not less three winter and three summer sessions thereof have been passed in one or more of such hospitals in London.

5. That he has studied anatomy and physiology by attendance on lectures and demonstrations, and by dissections, during three winter sessions of not less than six months each, at a recognised school or schools.

6. That he has attended lectures on the theory and practice of medicine and on clinical medicine, and also on the theory and practice of surgery, and on clinical surgery, during two sessions of six months each at recognised schools and hospitals.

7. That he has attended one course of lectures on each of the following subjects, viz., Chemistry, Materia Medica, Midwifery, with attendance on cases, Medical Jurisprudence, and Comparative Anatomy, at one or more recognised school or schools.

8. That he has attended the surgical practice of a recognised hospital or hospitals during four winter and four summer sessions, and the medical practice of a recognised hospital or hospitals during one winter and one summer session.

9. That he has served the office of house surgeon or dresser in a recognised hospital in the United Kingdom.

10. Every candidate is also required to present for examination clinical reports, with observations thereon of six surgical cases, taken by himself at a recognised hospital or hospitals in the United Kingdom, with satisfactory certificates of their authenticity and genuineness.

II. In the case of a candidate who shall have taken by examination the degree of bachelor or master of arts in any university in the United Kingdom, it shall be sufficient for him to produce a certificate or certificates that he has been engaged for five years instead of six years in the acquirement of professional knowledge in recognised hospitals or schools of surgery and medicine, but he shall in all other respects produce certificates of the foregoing course of study.

III. Any person who was a member of the college on the 14th day of September 1844, will, after the expiration of eight years from the date of his diploma, be admitted to the

professional examination for the fellowship upon the production of a certificate, signed by three fellows, that he has been eight years in the practice of the profession of surgery, and that he is a fit and proper person to be admitted a fellow, if upon examination he shall be found qualified.

IV. Any person having become a member of the college after the said 14th day of September 1844, will, after the expiration of 12 years from the date of the diploma, be admitted to the professional examination for the fellowship upon the production of a certificate, signed by three fellows, that he has been for 12 years in the practice of the profession of surgery, and that he is a fit and proper person to be admitted a fellow, if upon examination he shall be found qualified.

Candidates for the Certificate of Qualification in Midwifery.

1. Persons who were fellows or members of the college prior to the 1st day of January 1853, will be admitted to examination for the certificate of qualification in midwifery upon producing their diploma.

2. Persons having become members of the college subsequently to the 1st of January 1853, will be admitted to examination on producing their diploma, together with a certificate or certificates of having attended 20 labours.

3. Members or licentiates of any legally constituted college of surgeons in the United Kingdom, and graduates in surgery of any university requiring residence to obtain degrees, will also be admitted to examination on producing, together with their diploma, licence or degree, proof of being 21 years of age, of having been occupied four years in the acquirement of professional knowledge, of having attended one course of lectures on midwifery, and of having attended not less than 20 labours.

4. Graduates in medicine of any legally constituted college or university requiring residence to obtain degrees, will also be admitted to examination on producing, together with their diploma or degree, proof of being 21 years of age, of having been occupied four years in the acquirement of professional knowledge, of having completed, at recognised schools, the anatomical and surgical education required of candidates for the diploma of member of the college, of having attended one course of lectures on midwifery, and of having attended not less than 20 labours.

5. Persons having commenced their professional education, either by attendance on hospital practice, or on lectures on anatomy, prior to the 1st of January 1853, will be admitted to examination on producing the several certificates of professional education required for admission to examination for the diploma of member of this college, at the period when such persons shall respectively have in such manner commenced their professional education.

6. Persons having commenced their professional education, either by attendance on hospital practice, or on lectures on anatomy, after the 31st day of December 1852, will be admitted to examination on producing certificates of being 21 years of age, of having been engaged during four years in the acquirement of professional knowledge, of having completed, at recognised schools, the professional education required of candidates for the diploma of member of this college, of having attended one course of lectures on midwifery and the diseases of women and children, and of having personally conducted 30 labours.

28 April 1856. *Edm. Belfour*, Secretary.

Apothecaries' Society, London.

RETURN from the Society of Apothecaries of the City of *London*.

1st. Number of Licences to Practise granted in each Year for the last Ten Years.

From	1 August	1845	to	31 July	1846	-	-	-	230
„	1846	„		1847	-	-	-	-	265
„	1847	„		1848	-	-	-	-	246
„	1848	„		1849	-	-	-	-	253
„	1849	„		1850	-	-	-	-	278
„	1850	„		1851	-	-	-	-	238
„	1851	„		1852	-	-	-	-	271
„	1852	„		1853	-	-	-	-	269
„	1853	„		1854	-	-	-	-	290
„	1854	„		1855	-	-	-	-	275
„	1855	to	24 April	1856	-	-	-	-	208

2dly. Minimum

2dly. Minimum Age at which Candidates are eligible for Licences:
Twenty-one years.

3dly. Duration of the Period of Professional Study required of Candidates:
Five years; of which not less than three winter and two summer sessions must be devoted to the attendance on lectures at a recognised school of medicine and the medical practice of a recognised hospital, in the order prescribed in the following curriculum.

Each winter session to consist of not less than six months, and to commence not sooner than the 1st, nor later than the 15th of October, and each summer session to extend from the 1st of May to the 31st of July.

- First year
  - Winter Session
    - Chemistry.
    - Anatomy and Physiology.
    - Anatomical Demonstrations.
  - Summer Session
    - Materia Medica and Therapeutics.
    - Botany and Vegetable Physiology.
    - Midwifery and Diseases of Women and Children.
- Second year
  - Winter Session
    - Anatomy and Physiology.
    - Anatomical Demonstrations and Dissections.
    - Principles and Practice of Medicine.
    - Medical Practice.
  - Summer Session
    - Medical Practice.
    - Midwifery and Diseases of Women and Children.
    - Forensic Medicine.
    - Practical Chemistry.
    - Clinical Medicine.
- Third year
  - Winter Session
    - Dissections.
    - Principles and Practice of Medicine.
    - Medical Practice.
    - Clinical Medicine and Morbid Anatomy.

Practical Midwifery at any time after the conclusion of the first course of midwifery lectures.

Medical practice must be attended during the full term of 18 months; 12 months at an hospital connected with a recognised medical school, and six months either at a recognised hospital or dispensary if more convenient.

The above course of study may be extended over a longer period than three winter and two summer sessions, provided the lectures and medical practice are attended in the order prescribed.

4thly. Subjects of Examination:

1. A preliminary examination, on two separate days, in classics and mathematics, for students who have recently entered upon their professional education. Greek: the New Testament, Homer's Iliad, Xenophon's Anabasis. Latin: Virgil, Georgics, Æneid, Sallust, Horace, Cicero; Mathematics, Euclid (first book); Algebra, as far as Simple Equations, and general arithmetic.

This examination is voluntary on the part of the student, and is open to gentlemen from the commencement of their apprenticeship to the commencement of their second winter session.

The examination is conducted by written questions and answers, and *vivâ voce*.

The number of students who have availed themselves of the opportunity of passing this examination during each of the last five years is as follows:

October 1851	to	October 1852	- - - - - -	109
„ 1852	„	1853	- - - - - -	184
„ 1853	„	1854	- - - - - -	115
„ 1854	„	1855	- - - - -	118
„ 1855	to	March 1856	- - - - - -	68

A third examination for the present year will take place in the month of July.

For the convenience of candidates who have not availed themselves of the preliminary examination in classics and mathematics, and who are desirous of undergoing an examination in medical classics prior to their general examination for the certificate, an examination in medical classics is held on the first Saturday in the months of October, December, January, February, April, May, and June.

2. General Examination for the Certificate:

Translation of Celsus de Medicinâ and Gregory's Conspectus Medicinæ Theoreticæ, Physicians' Prescriptions, and the Pharmacopœia Londinensis.

Chemistry (inorganic and organic).

Practical Chemistry.
Materia Medica, Pharmacy, and Therapeutics.
Botany (including Vegetable Physiology).
Anatomy and Physiology.
Pathology.
Principles and Practice of Medicine.
Midwifery and the Diseases of Women and Children.

5thly. Mode of conducting the Examinations:

Ordinarily *vivâ voce*, but not unfrequently by written questions.

In Chemistry.—The examination is partly demonstrative.

In Materia Medica.—Specimens of various articles of the materia medica and chemical preparations are submitted to the candidate.

In Anatomy.—Portions of the human frame and plates are used as auxiliaries.

In the Principles and Practice of Medicine.—The examinations are not clinical in the sense of being conducted at the bed side, but they are so far practical as to elicit the knowledge acquired by the student from bed-side practice.

6thly. Time generally occupied by the Examination of a Candidate:

The average time is two hours.

7thly. Privileges conferred by the Licence:

The right to practise as an apothecary throughout England and Wales; that is to say, the right to attend the sick in diseases requiring medical treatment, and to prescribe, compound, and administer the remedies which the skill of the practitioner may suggest.

8thly. Who are the Examiners in the several Subjects of Examination respectively:

The following individuals compose the present Court of Examiners—

Edward Tegart, Member and Licentiate of the Society of Apothecaries, chairman.
Henry Combe, Member of the Society of Apothecaries and of the Royal College of Surgeons.
William Dickinson, Member and Licentiate of the Society of Apothecaries and Member of the Royal College of Surgeons.
Thomas Ansell, - - - ditto, ditto, and M. D., St. Andrew's.
William Perrin Brodribb, Member and Licentiate of the Society of Apothecaries and Member of the Royal College of Surgeons.
Richard Hopkins Robertson - - - ditto, ditto.
Robert Norton - - - ditto, ditto, M. D., Aberdeen.
Robert Hunter Semple, ditto, ditto, M.D., St. Andrew's, and Licentiate of the Royal College of Physicians of London.
Richard King, Member and Licentiate of the Society of Apothecaries and Member of the Royal College of Surgeons.
Thomas Rivington Wheeler, - - ditto ditto.
Stephen Henry Ward, - - - - ditto ditto, and M. D. of the University of London.
John Randall, - - - - - - - ditto ditto, and M. D. of the University of London.

There is in practice no distribution of the subjects of examination between the members of the court. Each member examines on all the subjects to which the examination extends.

9thly. When are the Examiners appointed?

Annually; between the last Thursday in July and the first Thursday in August.

10thly. For what period?

Twelve months.

11thly. By whom?

By the Master, Wardens, and Court of Assistants of the Society of Apothecaries.

Robt. B. Upton,
Clerk to the Society.

Apothecaries' Hall, 25 April 1856.

IRELAND.

RETURNS from the University of *Dublin*, the Queen's University in *Ireland*, the College of Physicians of *Dublin*, the College of Surgeons of *Dublin*, and the Apothecaries' Hall of *Ireland*, of the Number of MEDICAL and SURGICAL DEGREES granted in each Year for the last Ten Years, &c.

UNIVERSITY OF DUBLIN.

1. Number of Medical and Surgical Degrees granted by it in each year for the last Ten Years, distinguishing the Degree of Bachelor of Medicine from the Degree of Doctor of Medicine, and distinguishing those who, before obtaining such degrees, had already elsewhere obtained Diplomas or Licences to Practise.

Years.	M. D.	M. B.	Years.	M. D.	M. B.
1846 - -	- -	9	1851 - -	5	10
1847 - -	2	11	1852 - -	3	11
1848 - -	3	14	1853 - -	4	10
1849 - -	3	13	1854 - -	3	12
1850 - -	2	10	1855 - -	1	6

Diploma in Surgery established in 1851.

1852 - 3. 1853 - 3. 1854 - 3. 1855 - 2.

2. Duration of the Period of Professional Study required of the Candidates for the said Degrees.

For the degree of M. B. four years of professional study is required of the candidates, who must also have passed through four years of education in Arts. The degree of M. D. can be taken three years after that of M. B. has been obtained without any further attendance on medical lectures. For the diploma in surgery, the same amount of professional study is necessary and one year of education in Arts.

3. Minimum Age of Candidates for the same.
There is no age specified.

4. Subjects in which Candidates are examined.

Anatomy, Human and Comparative.	Practice of Medicine.
Surgery, including Operative.	Materia Medica.
General Chemistry.	Institutes of Medicine.
Practical Chemistry.	Midwifery.
Botany.	Medical Jurisprudence.

5. Mode of conducting the Examinations, whether *vivâ voce* only, or *vivâ voce* and by written Questions and Answers, and whether by Demonstrations, Dissections, and Clinical Examinations.
Vivâ voce, and by demonstrations.

6. Number of Medical Professors, and the Subjects of the Courses on the different branches of Medical Study.
The number of medical professors belonging to the school of physic is 12, six of whom are appointed by the University, and six by the King and Queen's College of Physicians; the subjects of the courses are those mentioned in the answer to No. 4.

7. Whether more than one Examination for each Degree is required; and, if more than one, with what interval.
There is but one examination required for the degree of M. B., and one for the diploma in surgery. There is no further examination for the degree of M. D. *See* reply to question No. 2.

8. Proportion of Rejected to Successful Candidates.

The proportion of rejected to successful candidates for the degree of M. B. in this university during the last six years (1850 to 1855) has been that of 1 to 14. There is no record of rejected candidates for the earlier portion of the period embraced in the inquiry.

The proportion of rejected to successful candidates for the diploma in surgery during the four years from 1852 to 1855 inclusive has been that of 1 to 5 ½.

The diploma in surgery was established in the year 1851.

9. Fees exacted for each Degree.

For the degree of M. D., 22 *l.*; for that of M. B., 11 *l.* 15 *s.*; for the diploma in surgery, 2 *l.* 10 *s.* These charges are independent of those for the medical courses, and of those for education in arts.

10. Privileges conferred by each Degree.

The degree of M. D. entitles to a vote at the election of the members for the University; that of M. B. gives the privilege of becoming a licentiate of the College of Physicians without further examinations; the diploma in surgery is a legal licence to practise, and enables its possessor to hold any public surgical appointment, with the exception of that to a county infirmary in Ireland.

11. Who are the Examiners in the several Subjects of Examination respectively; when, for what period, and by whom appointed.

The professors of the different branches of medical study are the examiners; they are elected by the Board of Trinity College and by the College of Physicians.

H. Lloyd,
Registrar of Trinity College.

Queen's University in Ireland.

Number of Medical Degrees granted by it in each year for the last Ten years; distinguishing the Degree of Bachelor of Medicine from the Degree of Doctor of Medicine, and distinguishing those who before obtaining such Degrees had already elsewhere obtained Diplomas or Licences to Practise.

The following is the number of medical degrees (M. D.) conferred by the University since its foundation, in the several years stated: no degree of Bachelor in Medicine is granted:

Years - - -	1852.	1853.	1854.	1855.	Total.
Degrees - -	* 13	9	3	† 9	34

It is known that a considerable number of the gentlemen who obtained the degree of M. D. had already obtained diplomas to practise surgery; but as this fact was not taken into account as an element in the qualification for the M. D. examination, it was not always stated by the candidates, and no record of the numbers so circumstanced has been kept.

Duration of the Period of Professional Study required of the Candidates for the said Degrees.

Candidates for degrees are required to have passed four years in professional studies under the following ordinance:—

FACULTY OF MEDICINE.

15*th March* 1852.

1st. Every candidate for the degree of M. D. shall produce a certificate from the council of one of the Queen's Colleges, that he has passed a full examination in the subjects of study prescribed in the course of matriculation for arts, and has been admitted a matriculated student of the college in the faculty of medicine.

2d. The curriculum shall extend over a period of at least four years, and shall be divided into periods of at least two years each.

3d. The

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* This number includes students of the Belfast Institution, which merged in the Queen's College.
† Two *ad eundem* degrees were also conferred this year.

3d. The first period shall comprise attendance on the following courses of medical lectures.

Chemistry.—Six months, at least three lectures each week.
Botany and Zoology.—Six months, three lectures each week, with *Herborizations* for practical study.
Anatomy and Physiology.—Six months, five lectures each week.
Practical Anatomy.—Six months.*
Materia Medica and Pharmacy.—Six months, three lectures each week.

4th. The second period shall comprise attendance on the following courses of medical lectures:—

Anatomy and Physiology.—Six months, five lectures each week.
Practical Anatomy.—Six months.*
Theory and Practice of Surgery.—Six months, three lectures each week.
Midwifery and Diseases of Women and Children.—Six months, three lectures each week.
Theory and Practice of Medicine.—Six months, three lectures each week.
Medical Jurisprudence.—Three months, three lectures each week.

5th. In addition to the above courses of lectures, candidates shall have attended during the first period of the above curriculum,—

Practical Chemistry (in a recognised laboratory).—Three months.
Medico-Chirurgical Hospital (recognised by the Senate), containing at least 60 beds; together with the *Clinical Lectures* therein delivered, at least two each week.—Six months.

6th. And during the second period,—

Practical Midwifery, at a recognised midwifery hospital, with the *Clinical Lectures* therein delivered, for a period of three months, in an hospital containing not less than 30 beds; or six months in an hospital containing not less than 15 beds.
Practical Pharmacy.—Three months.†
Medico-Chirurgical Hospital (recognised by the Senate), containing at least 60 beds; together with the *Clinical Lectures* therein delivered.—Eighteen months.

7th. Candidates, before being admitted to the degree of M. D., shall pass two examinations, the first examination comprising the subjects of the first period of the curriculum; the second comprehending subjects of the second period of study. It shall be competent for students to present themselves for their first examination at the termination of the first period of the curriculum, or at any after period to be fixed by the Senate previous to their undergoing the second examination.

8th. By the charter of the Queen's University, candidates are required to have attended *at least one-third of the courses of Medical Lectures* in some one of the Queen's Colleges. For the remainder of the courses of medical lectures, authenticated certificates will be received from the professors or lecturers in universities, colleges, or schools, recognised by the Senate of the Queen's University in Ireland.

9th. Candidates will also be required to have attended in some one of the Queen's Colleges, lectures on one modern language for six months, and lectures on Natural Philosophy for six months.‡

10th. The examinations will be conducted principally by printed papers, to which written answers shall be given, but the examiners shall also be at liberty to add such *vivâ voce* examination on the subjects of the written papers, and to call for such demonstrations and experiments as they may deem necessary.

11th. The above regulations will be binding on all students commencing their medical studies, on or after the 1st October 1852; but students already engaged in their medical studies, are at liberty either to complete their courses according to the Ordinance of 30th June 1850, or according to the present ordinance.

Regulations as to Reception of Certificates from Medical Lecturers and Hospitals.

1. Colleges or schools seeking recognition from the Queen's University are required to send in the name and qualification of the several lecturers whose lectures are required to be recognised,

* On the 20th of July 1852, the Senate resolved, that—The courses of lectures on practical anatomy, mentioned in the Ordinances, are understood to comprise attendance on anatomical demonstrations, accompanied with dissections by the student.

† 26th February 1853, the Senate resolved—That for attendance on practical pharmacy the candidate shall produce evidence of his having been engaged for the time specified in compounding medicine, either in the establishment of a legally qualified apothecary, or in the compounding department of some recognised hospital, under the superintendence of the apothecary of the institution.

‡ Candidates will of course be examined in these subjects.

recognised, with such particulars as the Senate may require. And in the event of the lecturers being changed, a fresh recognition must be sought.

2. All lecturers, and clinical lecturers, without exception, must transmit to the secretary on every 25th November and 1st of May, or as often as required, a return, filled up according to the form transmitted, of the students in attendance upon such lectures or hospital practice. The certificates of lecturers not complying with this regulation will not be recognised.*

Minimum Age of Candidates for the same.

The minimum age of candidates required by the first ordinance of the University was 21 years. By the subsequent ordinance, now in operation, and inserted above, the age is not limited, it being understood that candidates cannot have conformed to its requirements before attaining at least the age of 21. The average of the ages of candidates who have passed exceeds 25.

Subjects in which Candidates are examined.

Candidates at present are examined in medicine, surgery, modern languages, materia medica, pharmacy, and medical jurisprudence, anatomy, physiology and comparative anatomy or zoology, chemistry, botany, midwifery, and the diseases of women and children. The examination occupies 30 hours, forming portions of five consecutive days. There is also an honor examination of similar extent.

Mode of conducting the Examinations, whether *vivâ voce* only, or *vivâ voce* and by written Questions and Answers, and whether by Demonstrations, Dissections, and Clinical Examination.

The examinations are chiefly conducted by printed papers; but the examiners are at liberty to add such *vivâ voce* or other examination as they think proper.

Number of Medical Professors, and the Subjects of the Courses on the different branches of Medical Study.

The medical professors of the University, and the subjects of the courses on the different branches of medical study, are as follows:—

Queen's College, Belfast.

MEDICAL FACULTY.

Professors:

Anatomy and Physiology, and Practical Anatomy	Hugh Carlile, A.M., M.D., M.R.I.A.
Theory and Practice of Medicine	John C. Ferguson, A.M., M.B., Hon. Fel. K. & Q., Col. Phys.
Theory and Practice of Surgery	Alexander Gordon, M.D.
Materia Medica and Med. Jurisprudence	Horatio A. Stewart, M.D.
Midwifery, and Diseases of Women and Children	William Burden, M.D.

Modern Languages	Mathias J. Frings, Ph. D.
Natural Philosophy	John Stevelly, LL.D.
Chemistry and Practical Chemistry	Thos. Andrews, M.D., F.R.S., M.R.I.A.
Natural History (Botany and Zoology)	George Dickie, M.D.
Logic and Mental Philosophy	Rev. James M'Cosh, LL.D.

Anatomy

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* Returns of Students attending the following Medical Schools and Hospitals have been received during the year ended June 1855:—

Medical Schools of—	Hospitals.	Lying-In Hospitals.
Trinity College.	Jervis-street.	Rotunda.
Queen's College, Belfast.	City of Dublin.	Coombe.
Queen's College, Cork.	House of Industry.	Cork.
Queen's College, Galway.	St. Vincent's.	
Royal College of Surgeons.	S. and N. Infirmary, Cork.	
Carmichael School.	Meath.	
Original, Peter-street.	Belfast.	
Dublin, Peter-street.	Mercer's.	
	Galway Infirmary and Fever Hospital.	
	Steevens'.	

Students who purpose to present themselves for examination for medical degrees in the Queen's University, should ascertain that their names are returned for any medical lectures they may attend, lest, in consequence of such returns not having been supplied, their qualifications should be deemed insufficient when they so present themselves; and lecturers who are willing to make the required returns, and who have not received the necessary forms through the registrars of the respective institutions, should cause application to be made for them.

Anatomy and Physiology.

The lectures are given at 2 p.m. on the first five days of the week, and include the descriptive and structural anatomy and the physiology of the various organs of the human body, illustrated by comparative and morbid anatomy, microscopic views and drawings, and experiments.

The practical anatomy includes the anatomical demonstrations given by the demonstrator, Dr. Murney, at 11.45 a.m. on the first five days of the week, and the dissections carried on daily under the superintendence of the professor of anatomy and physiology, and the demonstrator of anatomy.

Theory and Practice of Medicine.

The lectures are given at 4 p.m. on the first four days of the week. The pathological department is amply illustrated by preparations, drawings, and plates. Oral examinations of the class are held frequently.

The Practice of Surgery.

The lectures on surgery are at 5 p.m., on Wednesdays, Thursdays, Fridays, and Saturdays, with oral examinations, and are illustrated by a great variety of drawings, diagrams, morbid preparations, and surgical apparatus. All the capital and minor operations are shown on the dead body.

Materia Medica.

The lectures on materia medica, which include general therapeutics and dietetics, are delivered four days in the week, viz., on Mondays and Tuesdays, at 5 p.m., and on Fridays and Saturdays, at 4 p.m. The museum of this department is most extensive, and has been enlarged by a grant of specimens from the Apothecaries' Hall, Dublin.

Midwifery.

Class meets at 3 p.m. on Mondays, Wednesdays, Thursdays, and Fridays, from the 1st of November to the end of April. The lectures include anatomy of the pelvis, physiology of conception, signs of pregnancy, the growth of fœtus, the management of labour, puerperal diseases of women, and treatment of children.

The explanation of these subjects is aided by diagrams, drawings, and preparations, and the student is taught the use of midwifery instruments on models.

The Lying-in Hospital in Belfast is open to students.

Chemistry.

I. *Chemistry.*—The lectures are delivered at 3 p.m. on the first five days of each week during the college session. The course embraces, in addition to chemistry proper, the general properties of heat, galvanism, and electro-magnetism, together with their more important applications to the arts.

II. *Practical Chemistry.*—In this course the students are instructed in the general methods of conducting chemical analyses, with special reference to the examination of the animal secretions and of medicinal substances.

Modern Languages.

I. *The French Language.*—This class meets Mondays, Wednesdays, and Thursdays, at 11 a.m., during the college session, and for medical students on Mondays and Thursdays, at 6 p.m.

The business of the class is conducted by lecturers, and translations from French into English, and *vice versâ*; by *vivâ voce* examinations, critical readings, and by written exercises. The subjects of lectures are the history of French literature, and the difficulties, peculiarities, and genius of the French language.

II. *The German Language.*—This class meets Mondays and Thursdays, at 7 p.m., during the college session.

The business of this class consists of lectures, translations from German into English, and *vice versâ*, of oral examinations, critical readings, and written exercises. The subjects of lectures are the history of German literature, the difficulties, peculiarities, and genius of the German language. A voluntary advanced class in both French and German, on Tuesdays and Fridays, from 6 to 8 p.m. The fee is reduced for students of second and third year, who have previously attended this class, and wish to take an extended course. Non-matriculated students admitted on payment of the usual fee.

Natural History.

I. *Zoology and Botany.*—This class meets at 1 p.m, on Mondays, Tuesdays, Wednesdays (Thursdays also for medical students), and Fridays.

The zoological course terminates the first week in March, and comprehends the outlines of the anatomy and physiology of animals, followed by systematic zoology and the distribution of animals.

The botanical part of the course commences the first week in March, and includes vegetable anatomy and physiology, descriptive botany and the distribution of plants.

In addition to the class lectures on botany, meetings are held in the botanic garden, and practical excursions made into the neighbouring country.

Natural Philosophy.

I. *Natural Philosophy.*—This class meets at 12 noon, on Mondays, Wednesdays, and Fridays (Tuesdays and Thursdays, voluntary), during the college terms. The business of this class consists of rigorous demonstrations of the principles of mechanics, hydrostatics, pneumatics, acoustics, optics, and astronomy, with occasional experimental illustrations.

II. *Practical Mechanics.*—This class meets at 1 p.m., on Tuesdays and Thursdays during the college terms. The subjects of lecture are the practical applications of the principles of mechanics, hydrostatics, hydraulics, and pneumatics, to architectural and engineering purposes.

III. *Experimental Physics.*—This class meets at 2 p.m., Mondays, Wednesdays, and Fridays. These lectures consist of familiar explanations of the leading principles of physical science, requiring little aid from mathematical science, but fully illustrated by experiments.

Logic and Metaphysics.

I. *Logic.*—This class meets at 2 p.m., on Tuesdays, Wednesdays, Thursdays, and Fridays, during the first and part of the second term of the session.

The business of the class is conducted by lectures—1st, on the "Laws of Thought," and, 2d, on Applied Logic, embracing Baconian Induction; and also by examination on a text-book on Formal Logic. It is recommended that students read "Taylor's Elements of Thought," and "Whately's Easy Lessons on Reasoning," before entering the class.

The examination takes place at the end of the course of lectures.

II. *Metaphysics.*—This class meets at 11 a.m., on Tuesdays, Wednesdays, Thursdays, and Fridays, during the first and second terms of the session.

It is conducted by a course of lectures—1st, on Psychology, or the science which proposes to inquire, in an inductive manner, into the faculties and laws of the human mind; and, 2d, Metaphysics Proper, or the science of first or intuitional principles, together with an examination on the lectures, and on the Epitome of the History of Philosophy adopted by the University of France, and translated by Henry.

The examination at the end of the second term.

Queen's College, Cork.

MEDICAL FACULTY.

Anatomy and Physiology, and Practical Anatomy	J. H. Corbett, M.D., L.R.C.S.I.
Theory and Practice of Medicine	Denis C. O'Connor, A.B., M.D.
Theory and Practice of Surgery	Denis B. Bullen, M.D.
Materia Medica and Medical Jurisprudence	Alexander Fleming, M.D.
Midwifery and Diseases of Women and Children	Joshua A. Harvey, A.B., M.D.

Modern Languages	Raymond De Vericour, D. es. L.
Natural Philosophy	John England, A.M.
Chemistry and Practical Chemistry	John Blythe, M.D.
Natural History	W. Smith, F.L.S.
Logic and Mental Philosophy	George Sidney Read, A.M.

THE COURSE OF ANATOMY AND PHYSIOLOGY.

Five Lectures each Week.

1st. General description of all the textures of the human frame; the structure and chemical composition of all the solids and fluids of the body.

This part includes microscopic anatomy.

2d. Physiological anatomy of the organs of locomotion, circulation, respiration, digestion, secretion, absorption, reproduction; of the senses of smell, touch, sight, hearing; of the brain, spinal cord, and nerves.

3d. All

3d. All the departments of human physiology, which are elucidated by reference to comparative anatomy and physiology.

Descriptive and Practical Anatomy—Daily.

The course of anatomical demonstrations includes the description of the bones, ligaments, joints, muscles, arteries, veins, nerves, and viscera.

Surgical anatomy is taught by a special course of lectures, and consists of demonstrations of the principal regions of the body, considered in their relations to operative surgery.

The demonstrations are performed by the professor of anatomy and the demonstrator.

The dissections performed by the students are constantly superintended by the professor of anatomy, assisted by the demonstrator.

Practice of Medicine—Three Days each Week.

1st. Inflammation; inflammatory diseases; functional and organic diseases of the brain; spinal cord and nervous system generally; of the organs of respiration, circulation, digestion, secretion, and excretion.

Diseases of morbid development are introduced in connexion with the organs in which they are most frequently found—as scrofula, in connexion with diseases of the lungs, and cancer with diseases of the stomach.

2d. Idiopathic fevers, and other diseases not traceable to a local organ.

Surgery—Three Days each Week.

1st. Principles of surgery; theory of inflammation; organic results of morbid action of the nervous and muscular systems; changes of tissues; description of the injuries and diseases of the several surgical regions, and their treatment.

2d. Special and operative surgery; instructions to military surgeons on hospital service and in the field; wounds, gun-shot wounds, fractures, dislocation, diseases of the eye, ear, skin, and venereal diseases, &c.

3d. Demonstrations of the different methods of performing surgical operations, illustrated upon the recent subject.

Materia Medica and Therapeutics—Three Days each Week.

Natural and chemical history, action and uses of drugs, treated of in the order of an arrangement founded on their physiological effects.

Midwifery—Three Days in each Week.

1st. Physiology of the function of reproduction, human and comparative; formation, development, and diseased condition of the embryo. Peculiarities and diseases of the fœtus.

2d. Pregnancy, its physiological and pathological conditions, and its management.

3d. Parturition, its physiology, mechanism, and various forms both natural and morbid, and their management.

4th. Puerperal diseases; their history, nature, and treatment.

5th. Management of infants in health and disease.

Lectures on Medical Jurisprudence are delivered by the Professor of English Law, and by the Professor of Chemistry.

Clinical Lectures on Medicine and Surgery are delivered by the Physicians and Surgeons of the Hospitals.

Modern Languages.

Senior French Class (Medical),	Mondays,	Wednesdays,	Fridays, 12—1, p. m.
Junior French Class (Arts) -	ditto -	ditto -	ditto, 1—2, „
Italian Class - - - - - -	ditto -	ditto -	ditto, 2—3, „
German Language - - -	Tuesdays and	Fridays - - -	2—3, „

Senior French.—Eloges des Membres de l'Académie de Médecine, par Pariset. Extracts from Bichat, Andral, Lallemand. Weekly Lectures on the Grammar and Idioms.

Junior French.—Bossuet's Oraisons Funèbres. Fables de la Fontaine. Racine's Athalie, Esther. Molière's Avare. Barthe's Histoire de la Littérature Française. Extracts from Villemain, Châteaubriand, and Lamartine. Weekly Lectures on the Grammar and Idioms.

Italian.—Silvio Pellico. Tasso. Extracts from Macchiavelli, Guicciardini, Davila. Manzoni. Weekly Lectures.

German.—Schiller's Thirty Years' War. Göthe's Ballads and Egmont. Schiller's Wilhelm Tell. Weekly Lectures.

Natural Philosophy.

Experimental Physics.—Course attended by arts students of the third year, engineering students of the second year, agricultural students of the first year, and by medical and by non-matriculated students. Mondays, Wednesdays, and Fridays, from 2 to 3 p.m.

Text Books.—Galbraith and Haughton's Treatises on Mechanics, Hydrostatics, &c. Chamber's Natural Philosophy.

Chemistry.

The course is divided into inorganic and organic chemistry.

In the first part are discussed the laws of combination and affinity, molecular chemistry and crystallography, and the history of the non-metallic and metallic substances.

In the organic portion of the course will be considered the subjects of organic analysis, organic series, compound radicals and types. Metamorphosis of organic bodies, history of special animal and vegetable bodies.

In treating of the laws of chemistry, and the history of inorganic and organic bodies, those points will be chiefly dwelt upon which have a practical bearing in the arts, medicine, engineering and agriculture. Thence, during the course, attention will be directed to the application of chemistry to medicine and physiology, to metallurgic operations, chemical manufacture, building materials, soils, manures.

Natural History.

Zoology.—General outline of the animal kingdom. Histological examination of animal structure; organographical and comparative history of the functions of nutrition, relation, and reproduction; sketch of the classes, orders, and families of animals, with a special examination of one or more, particularly in reference to the British fauna.

Botany.—General outline of the vegetable kingdom. Histology of the plant, organography, functions of vegetation, morphology and phyllotaxis, principles of classification, history of the principal natural orders, especially those of economical and medical importance, herborizations and applications of the course to our native flora.

Logic.

I. Lectures, examinations, and exercises in Aldrich's Compendium of Logic.

II. A full discussion and classification of the theory of hypothetical syllogisms and of induction, and the new analytic of logical forms, as contained in the works of Mill, Whately, Thompson, and Baynes, &c.

Queen's College, Galway.

MEDICAL FACULTY.

Professors:

Anatomy and Physiology, and Practical Anatomy	Charles Croker King, M. D., F. R. C. S. I., M.R.I.A.
Theory and Practice of Medicine	Nicholas Colahan, M.D., F.R.S.E.
Theory and Practice of Surgery	James V. Browne, A.B., M.D., F.R.C.S.I.
Materia Medica and Medical Jurisprudence,	Simon M'Coy, M.D., F.R.C.S.I.
Midwifery and Diseases of Women and Children	Richard Doherty, M.D., V.P. Dublin Obstetrical Society.

Modern Languages	Augustus Bensbach, M.D.
Natural Philosophy	George Johnstone Stoney, A.M.
Chemistry and Practical Chemistry	Edmund Ronalds, PH. D.
Natural History	A. G. Melville, M.D., Edinburgh, M.R.C.S., England, M.R.I.A.
Logic and Mental Philosophy	Thomas W. Moffett, A.M., LL.D.

FIRST SESSION.

French or German.—As prescribed for students in arts, of the first year.

Natural Philosophy.—Elements of mechanics, hydrostatics, pneumatics, optics, heat and electricity.

Chemistry.—General principles of chemical philosophy, laws of combination by weight and volume, atomic theory, nature of salts, &c., chemistry of the non-metallic bodies and of the metals, organic chemistry.

Botany.

Botany. (Three Months.)—Anatomy and physiology of plants, morphology, principles of classification, natural system, descriptions of the natural orders, geographical distribution of plants.

*** Botanical excursions on Saturdays.

Zoology. (Three Months.)—Structure of the different tribes of animals. Phenomena of life. Application of principles thence derived to the preservation of health and prevention of disease in man and the domestic animals. Food, ventilation, warming, clothing, &c. Natural arrangement of animals. Geographical distribution of animals. General laws of distribution.

Anatomy and Physiology. (Six Months.)—Structural anatomy of the human body, including the examination of the physical and vital properties of the various tissues; systematic anatomy and physiology of the instruments of organic life.

SECOND SESSION.

Comparative Anatomy. (Three Months.)

Practical Chemistry. (Three Months.)—Students will be required to prepare the principal gases, and practically to examine their properties. Many of the more important chemical preparations of the Pharmacopœia, such as nitric, hydrochloric, and prussic acids, ammonia, potash, ether, &c., salts used in the arts and in medicine, as alum, chloride of zinc, calomel, iodide of potassium, and tests employed in the laboratory, will also be made. The methods of testing in general, and as applied to detect impurities in drugs and commercial chemical products, as well as to the detection of arsenic and other poisons, will form part of the course.

Anatomy and Physiology. (Six Months.)—General and systematic anatomy of the human body; physiology of the functions of animal life.

Practical Anatomy. (Six Months).—Includes demonstrative lectures upon the special and relative anatomy of the human body, and practice of dissection, under the superintendence of the professor and of the demonstrator of anatomy.

Materia Medica. (Six Months.)—Natural history and chemical relations of medicines, their physical properties, physiological effects, and therapeutic actions; distinction between different articles in the same class of medicaments; poisonous actions of medicines and means of counteraction; exhibition of chemical and other experiments necessary for elucidation; consideration of remedial agents, not included in the British Codex; different modes of exhibiting medicines, and the application of each according to particular requirements.

THIRD SESSION.

Practice of Surgery. (Six Months.)—Theory of abnormal actions arising from inflammation and its consequences; such as formation of abscesses, ulceration, tumours; symptoms, local and constitutional, of surgical diseases; their diagnosis, prognosis, and medical treatment; demonstrations of the surgical operations, and varieties in the methods adopted in each according to authorities, and peculiarities of the case; methods of proceeding in other surgical cases, as treatment of fractures, luxations, &c.

Midwifery. (Six Months.)—General view of the reproductive function throughout animated nature; anatomy and physiology of the special organs; development of the ovum; constitutional and local effects of conception; evidences and duration of pregnancy; natural labour, its signs, stages, and management; treatment of the child at birth; alteration in its circulation; mechanism of parturition; measurements of the pelvis; variations from natural presentations; compound, complicated, and difficult labours; use of instruments, of chloroform, of ergot; premature confinement; morbid states of ovum, diseases of childbed; lactation, choice of a nurse; fœtal peculiarities and growth; the occasional defects in the newly born; suspended animation, its causes and treatment; management of infants; composition of milk; artificial feeding; causes of peculiarities in diseases of infancy and childhood; dentition; diseases affecting the different systems, in their order; development of the female system; its constitutional derangements; organic displacements and diseases; use of the speculum; alterations consequent on age; climacteric disease in women.

Clinical Surgery.*

FOURTH SESSION.

Practice of Medicine. (Six Months.)—Diseases in general, causes, extrinsic and intrinsic. Terminations, fatal or favourable; prevention, treatment; inflammation in general; inflammation of the organs of respiration and circulation, of the viscera, of the abdomen and pelvis, of the nervous system generally, of the eye and ear, &c.; idiopathic fevers, their varieties and symptoms; pathology; structural changes; terminations, treatment; chronic diseases,

* Clinical instruction in medicine and surgery is given at the County Galway Infirmary, by the Professors of the Medical Faculty.

d seases, functional and organic; diseases of the skin, and other diseases not referable to the above arrangement.

Medical Jurisprudence.—Nature of medical evidence; responsibilities and obligations of medical witnesses; injuries to the person, including wounds, infanticide, rape, &c., distinguishing the contingents of accident or malice, and if fatal, whether death was the result or only coincident; classification of poisons; symptoms peculiar to each class and to each poison; lesions of texture or other post mortem evidence of their presence or action; tests for poisonous substances possessing chemical reaction, and for blood and other stains; death from cold, starvation, lightning, &c.; judicial questions arising from pregnancy; responsibility and capability of the insane, idiotic, or otherwise diseased in mind. Through the course, short references made to such parts of the criminal code as may be necessary to show the chief points for medical investigation.

CLINICAL MEDICINE.*

Whether more than one Examination for each Degree is required; and, if more than one, with what interval.

Students who have commenced their medical education since October 1852, must pass two examinations, the first after the termination of two years' study, the second after the termination of four years; but there is no necessary interval between these two examinations. Older students must have been occupied four years in medical studies.

Proportion of Rejected to Successful Candidates for each Degree.

Taking the whole of the medical examinations into account, the rejections have been exactly one-fifth; viz., of fifty candidates, ten have been rejected.

Fees exacted for each Degree.

The fee required for the degree of M. D. is *5 l.*; it is paid by the candidate on entering for final examination, and is not returned in case of rejection.

Privileges conferred by each Degree.

Of the privileges conferred by the degree, the Royal Charter ordains that all students who shall have obtained degrees in medicine, in the Queen's University in Ireland, shall be fully possessed of all such rights, privileges, and immunities as belong to similar degrees granted by other universities or colleges, and shall entitle the persons on whom they may be conferred to whatever rank and precedence is derived from similar degrees granted by other Universities.

Who are the Examiners in the several Subjects of Examination respectively; when, for what period, and by whom appointed?

Examiners are, under the provisions of the charter, appointed annually by the Senate, and are ordinarily re-elected a second year. The following is a list of the examiners who have thus been appointed for the examination of medical candidates, the last named under each head being the existing examiner.

In Natural Philosophy.

Professor Stevelly, LL.D., Q.C.B.; Professor Shaw, F.T.C.D., Q.C.C.; Professor Stoney, A.M. Q.C.G.

Chemistry.

Professor Apjohn, M.D., T.C.D., F.R.S.; Professor Ronalds, PH.D., Q.C.G.; Professor Blythe, M.D., Q.C.C.

Anatomy and Physiology.

Professor Carlile, A.M., M.D., Q.C.B.; Professor C. Croker King, M.D., Q.C.G.; Professor Corbett, M.D., L.R.C.S.I., Q.C.G.

Botany and Zoology.

Professor Allman, M.D., T.C.D., F.R.S.; Professor Dickie, M.D., Q.C.B.; Professor Melville, M.D., Q.C.G.

Modern Languages.

The Rev. Professor Abeltshausser, LL.D., T.C.D.; Professor Frings, PH.D., Q.C.B.

Medicine.

Cathcart Lees, M.D.; John Banks, M.D.; S. Gordon, M.D.

Surgery.

John Hamilton, F.R.C.S.; J. S. Hughes, M.D., F.R.C.S.; C. Fleming, M.D., F.R.C.S.

Pharmacy, Materia Medica, and Medical Jurisprudence.

Professor Fleming, M.D.; Aquilla Smith, M.D.; Professor Wm. Barker, M.D.

Midwifery and Diseases of Women and Children.

Thomas M'Keever, M.D.; H.L.DWYER, M.B.; R. Doherty, M.D., Q.C.G.

(By order.)

Robert Ball, LL.D., Secretary.

* Clinical instruction in medicine and surgery is given at the County Galway Infirmary, by the Professors of the Medical Faculty.

King and Queen's College of Physicians, Ireland.

Return of the King and Queen's College of Physicians, in *Ireland*, embracing a Period of Ten Years, from the 1st May 1846 to the 1st May 1856.

1. Admissions to the College:—

Year ending	Fellows.	Hon. Fellows.	Licentiates.
1 May 1847	-	1	2
„ 1848	-	2	1
„ 1849	1	-	4
„ 1850	2	3	7
„ 1851	1	1	2
„ 1852	1	11	13
„ 1853	-	-	9
„ 1854	1	-	14
„ 1855	-	1	9
„ 1856	1	-	10

2. Duration of Professional Study:—
   (*a*) For Licentiates: Four years.
   (*b*) For Fellows: Licentiates of three years' standing, who are graduates in arts of Oxford, Cambridge, or Dublin.
3. Age of Candidates for Examination: Not fixed.
4. Subjects of Examination:
   (*a*) First day: Anatomy and physiology, botany, chemistry, and institutes of medicine.
   (*b*) Second day: Acute diseases, chronic diseases, materia medica, midwifery.
   (*c*) The President may require all candidates, except graduates of Oxford, Cambridge, and Dublin, to translate from a Greek or Latin medical author.

5. All candidates (except medical graduates and surgeons of seven years' standing) are examined on two separate days, at an interval of not less than four days. Medical graduates and surgeons of seven years' standing are subjected to the second day's examination only.
6. Examinations are conducted *vivâ voce*. Specimens of the materia medica, chemical substances, and living plants are submitted to the candidates for their identification.
7. Each examination occupies from an hour to an hour and a half.
8. The great majority of those examined have either previously obtained medical degrees from a university, or diplomas from one of the Colleges of Surgeons in the United Kingdom. No means exist by which it can be ascertained whether those admitted as licentiates subsequently obtain qualifications from any other body.
9. The proportion of rejected to successful candidates, during the last ten years, is as 1 to 14.
10. The fees payable by admitted candidates are as follows:—

Licentiates:	Fee to the college	£. 30
	Stamp duty	15
		£. 45
Fellows:	Fee to the college	£. 20
	Stamp duty	25
		£. 45

The College has no other source of income but the fees obtained by the admissions of ellows and licentiates.

11. The privileges conferred upon licentiates are as follows:—
   By the Charter of William and Mary:
   (*a*) Exclusive right to practise medicine in Dublin, and in a circuit of seven miles of the same.
   (*b*) The right to practise medicine in all other parts of Ireland outside those limits.
   By the County Infirmaries Act, Ireland:
   (*c*) The exclusive right to the office of physician to county infirmaries.
   By the Grand Jury Act, Ireland:
   (*d*) The right (as well as licentiates of the Colleges of Physicians, London and Edinburgh,) to the appointment of physicians to gaols and prisons.

By the Charter, and the Act 1 Geo. 3, c. 14, Ireland:

The College has the right to inspect all apothecaries' and druggists' shops in Dublin, and within ten miles of same, and to make reports upon the condition and state of all drugs, utensils, weights, and measures therein, and to punish persons offending.

The right to issue a Pharmacopœia, the directions of which all apothecaries in Ireland are bound to observe, under a penalty of 10*l.*

According to 31 Geo. 3, c. 34:

The right to examine, upon appeal, candidates that have been rejected by the Apothecaries' Company, and to grant to those admitted the usual certificate to "open shop, and exercise the art or mystery of an apothecary."

12. The Examiners are the President and four Censors, who are annually elected by the College from out of the Fellows upon St. Luke's Day.

29 April 1856. *Wm. Edw. Steele*, M. D., Registrar.

Royal College of Surgeons in Ireland.

Number of Fellows and Licentiates admitted during the last Ten Years.

	Admitted.	Rejected.
June 1845 to June 1846:		
Fellows	2	—
Licentiates	38	—
Licentiates in midwifery	7	—
June 1846 to June 1847:		
Licentiates	38	2
Licentiates in midwifery	4	—
June 1847 to June 1848:		
Licentiates	56	5
Licentiates in midwifery	9	—
June 1848 to June 1849:		
Licentiates	45	13
Licentiates in midwifery	8	—
June 1849 to June 1850:		
Fellows	1	—
Licentiates	45	1
Licentiates in midwifery	5	—
June 1850 to June 1851:		
Licentiates	45	3
Licentiates in midwifery	10	—
June 1851 to June 1852:		
Fellows	1	—
Licentiates	43	2
Licentiates in midwifery	5	—
June 1852 to June 1853:		
Fellows	5	—
Licentiates	51	7
Licentiates in midwifery	2	—
June 1853 to June 1854:		
Fellows	3	—
Licentiates	72	—
Licentiates in midwifery	3	—
June 1854 to June 1855:		
Fellows	2	—
Licentiates	79	7
Licentiates in midwifery	3	—

Duration

Duration of the Period of Professional Study.

Fellows - - - -	Six years.
Licentiates - - - -	Four years.

Age at which Candidates are eligible for Examination.

Fellows - - - - -	Twenty-five.
Licentiates - - - - -	No limitation.

Subjects of Examinations.

Fellows.—The subjects of the first examination are anatomy and physiology (human and comparative); those of the second, pathology, therapeutics, the theory and practice of medicine and surgery, and such other branch of medical science as the council may from time to time direct. In the anatomical examinations the candidates perform dissections and operations on the dead body.

Licentiates.—Each candidate is examined upon anatomy, physiology, the theory and practice of medicine and surgery, materia medica, and the form of prescription, and shall perform such surgical operations or dissections, or explain such anatomical and pathological preparations as the examiners may require.

Licentiates in Midwifery.—Candidates are examined in midwifery and diseases of women and children by the examiners in that branch.

Classical Examination to which Fellows and Licentiates are required to submit.

In Greek, in the Greek Testament; in Latin, in the first five books of the "Æneid" of Virgil.

Whether the Candidate is subject to more than one Examination; if to more than one, at what interval?

Fellows and licentiates are examined upon two several days, usually successive.

Licentiates in midwifery are examined upon one day only.

Mode of Conducting the Examinations.

Fellows.—Five examiners at least, together with the president, or vice-president, and two members of the council are present at each examination.

In addition to oral examinations, candidates are required to give written answers to written or printed questions, to be delivered to them in such manner as the council may direct.

In the anatomical examination, the candidates also perform dissections and operations on the dead body.

Candidates whose answering shall be found insufficient, will not be allowed to present themselves a second time, until after the expiration of one year from their first examination.

Licentiates are examined orally, and in addition shall perform such surgical operations or dissections, or explain such anatomical and pathological preparations as the examiners may require.

Five examiners at least must be present at each examination.

Time occupied in the Examinations.

Fellows are examined during about two hours each day.

Licentiates are examined during about one hour each day.

Licentiates in midwifery are examined during about one hour.

Of those who, obtaining Licences and Diplomas, have elsewhere obtained Licences to Practise.

No information can be afforded.

Proportion of Rejected to Successful Candidates.

Fellows: None were rejected during the last 10 years.

Licentiates: One in 13 rejected.

Fees.

Fellows: £.42. (including 5*l.* 5*s.* for classical examination and registration).

Licentiates: £.26. 5*s.* - - - - (ditto.)

Candidates for the diploma in midwifery being necessarily fellows or licentiates of the college, are admitted to examination in midwifery without additional fee.

Privileges.

Fellows constitute the corporation.

Licentiates are admitted to the library and museum.

Fellows and licentiates have no exclusive privileges to practise, except in regard to the county infirmaries of Ireland, for the office of surgeon in which the diploma of the college is a requisite qualification.

Who are the Examiners; When, for what Period, and by whom Appointed.

Seven examiners for fellowships and letters testimonial, and three examiners in midwifery, are chosen from among the fellows of the college annually, by the council, in presence of the whole college summoned to witness the election. They must not be members of the council or teachers in schools.

Royal College of Surgeons, in Ireland,
25 April 1856.

H. Maunsell,
Secretary to Council.

Apothecaries' Hall, Ireland.

Return from the Apothecaries' Hall of *Ireland.*

1. Number of Licences to Practise granted in each Year for the last Ten Years?—

For the year ending 31 December	1846	- - -	27
" "	1847	- - -	24
" "	1848	- - -	22
" "	1849	- - -	20
" "	1850	- - -	25
" "	1851	- - -	19
" "	1852	- - -	21
" "	1853	- - -	16
" "	1854	- - -	17
" "	1855	- - -	23

2. Minimum Age at which Candidates are eligible for Licence?—Twenty-one years.

3. Duration of the Period of Professional Study required of Candidates?—Five years.

4. Subjects of Examination?—Chemistry, pharmacy, materia medica, natural history, botany, anatomy, physiology, theory and practice of medicine, midwifery, and medical jurisprudence.

5. Mode of conducting the Examinations; whether *vivâ voce*, or by written Questions and Answers, or both; and whether by Demonstrations, Dissections, and Clinical Examinations?—Partly *vivâ voce*, and partly by written questions and answers, and also by demonstrations.

6. Time generally occupied by the Examination of a Candidate?—One hour.

7. Privileges conferred by the Licence?—Of practising medicine, with the exclusive right of pharmacy.

8. Who are the Examiners in the several Subjects of Examination respectively; when, for what period, and by whom appointed?—The 15 directors, who are qualified apothecaries, and who divide the several subjects among them. The examiners are chosen annually, upon the 1st of August, from and by the General Council of the Company.

(By authority.)

Apothecaries' Hall, Dublin,
26 April 1856.

C. H. Leet,
Secretary.

SCOTLAND.

RETURNS from the Universities, &c. in *Scotland*, regarding MEDICAL LICENCES.

UNIVERSITY OF EDINBURGH.

REPLIES by the Senatus Academicus of the University of Edinburgh to Queries transmitted by the House of Commons, and sent to the Very Reverend Principal Lee, on 23d April 1856, by Mr. Brodie, Crown Agent.

1. The number of medical degrees granted in each year during the last 10 years is as follows:

In 1846	the number was	64
In 1847	„	58
In 1848	„	63
In 1849	„	51
In 1850	„	67
In 1851	„	45
In 1852	„	51
In 1853	„	85
In 1854	„	56
In 1855	„	54

All the degrees were those of M. D.

No surgical degrees nor degrees of bachelor of medicine were given.

There are no means of ascertaining exactly the number of the graduates who took surgical diplomas, but it may be said that the greater number did so, either in Edinburgh or in London.

2. The duration of the period of study required for the degree of M. D. is four years.

3. The minimum age of candidates for the degree of M. D. is 21.

4. The subjects upon which the candidates are examined are anatomy, chemistry, institutes of medicine, botany, natural history, including zoology, materia medica, surgery, practice of medicine, general pathology, midwifery, and medical jurisprudence.

A COPY of the Statutes for the Degree of M. D. is as follows:

STATUTES of the University of Edinburgh, relative to the Degree of M. D., sanctioned on 27th October 1846.

Sect. I. No one shall be admitted to the examinations for the degree of doctor of medicine who has not been engaged in medical study for four years, during at least six months of each, in the University of Edinburgh, or in some other university where the degree of M. D. is given; unless, in addition to three medical sessions so constituted, he has attended, during at least six winter months, the medical or surgical practice of a general hospital, which accommodates at least 80 patients, and during the same period a course of practical anatomy.

Sect. II. No one shall be admitted to the examinations for the degree of doctor who has not given sufficient evidence:

1. That he has studied, once at least, each of the following departments of medical science, under professors of medicine, in this or in some other university, as already defined, viz.:

Anatomy Chemistry Materia Medica and Pharmacy Institutes of Medicine or Physiology Practice of Medicine Surgery Midwifery, and the Diseases peculiar to Women and Children General Pathology, or in Schools where there is no such Course, a Three Months' Course of Lectures on Morbid Anatomy, together with a supplemental Course of Practice of Medicine, or Clinical Medicine	During Courses of Six Months.
Practical Anatomy (unless it has been attended in the year of extra-academical study allowed by Sect. I.)	During Courses of Six Months.
Clinical Medicine, that is, the Treatment of Patients in a Public Hospital, under a Professor of Medicine, by whom Lectures on the Cases are given	During Courses of Six Months, or two Courses of Three Months.
Clinical Surgery Medical Jurisprudence Botany Natural History, including Zoology	During Courses of at least Three Months.

2. That in each year of his academical studies in medicine, he has attended at least two six months' courses of lectures, or one of these and two three months' courses.

3. That, besides the course of clinical medicine already prescribed, he has attended, for at least six months of another year, the medical or surgical practice of a general hospital, either at Edinburgh or elsewhere, which accommodates not fewer than 80 patients.

4. That he has been engaged, for at least six months, by apprenticeship or otherwise, in compounding and dispensing drugs at the laboratory of an hospital, dispensary, member of a surgical college or faculty, licentiate of the London or Dublin Society of Apothecaries, or a professional chemist or druggist.

5. That he has attended, for at least six months, by apprenticeship or otherwise, the out-practice of an hospital, or the practice of a dispensary, physician, surgeon, or member of the London or Dublin Society of Apothecaries.

Sect. III. Attendance on the lectures of teachers of medicine in the hospital schools of London, or school of the College of Surgeons in Dublin, or of teachers of medicine in Edinburgh, recognised as such by the Royal Colleges of Physicians and Surgeons of Edinburgh (in accordance with regulations to be adopted by these colleges jointly, and approved of by the patrons of the university), shall, to the extent of one-third of the whole departments required by Section II., clause 1, to be studied by candidates, be held equivalent to attendance under professors in this or in some other university, as already defined. And such attendance shall be available to candidates to the extent of one of the four years of study required by Section I., provided it has embraced, in one year, at least two six months' courses of lectures, or one of these and two three months' courses.

Sect. IV. No one shall obtain the degree of doctor who has not studied, in the manner already prescribed, for at least one year previous to his graduation, in the University of Edinburgh.

Sect. V. Every candidate must deliver, before the 31st of March of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine—

1. A declaration, in his own handwriting, that he is 21 years of age, or will be so before the day of graduation; and that he will not be then under articles of apprenticeship to any surgeon or other master.

2. A statement of his studies, as well in literature and philosophy as in medicine, accompanied with proper certificates.

3. A medical dissertation composed by himself, in Latin or English; to be perused by a professor, and subject to his approval.

Sect. VI. Before a candidate be examined in medicine, the medical faculty shall ascertain, by examination, that he possesses a competent knowledge of the Latin language.

Sect. VII. If the faculty be satisfied on this point, they shall proceed to examine him, either *vivâ voce*, or in writing; first, on anatomy, chemistry, botany, institutes of medicine, and natural history, bearing chiefly on zoology; and, secondly, on materia medica, pathology, practice of medicine, surgery, midwifery, and medical jurisprudence.

Sect. VIII.

Sect. VIII. Students who profess themselves ready to submit to an examination on the first division of these subjects, at the end of the third year of their studies, shall be admitted to it at that time.

Sect. IX. If any one, at these private examinations, be found unqualified for the degree, he must study during another year two of the subjects prescribed in Section II., clause 1, in this or in some other university, as above defined, before he can be admitted to another examination.

Sect. X. Should he be approved of, he will be allowed, but not required, to print his thesis; and, if printed, 40 copies of it must be delivered before the 25th day of July to the Dean of the Medical Faculty.

Sect. XI. If the candidate have satisfied the medical faculty, the Dean shall lay the proceedings before the Senatus Academicus, by whose authority the candidate shall be summoned, on the 31st of July, to defend his thesis; and, finally, if the Senate think fit, he shall be admitted, on the first lawful day of August, to the degree of doctor.

Sect. XII. The Senatus Academicus, on the day here appointed, shall assemble at 10 o'clock a.m., for the purpose of conferring the degree; and no candidate, unless a sufficient reason be assigned, shall absent himself, on pain of being refused his degree for that year.

Sect. XIII. Candidates for graduation shall be required to produce evidence of their having conformed to those regulations which were in force at the time they commenced their medical studies in a university.

5. The examinations are conducted by written questions and answers, as well as *vivâ voce*. In the case of anatomy, botany, and natural history, dissections, fresh specimens of plants from the Botanic Garden, and museum preparations are employed in the *vivâ voce* examinations, and the microscope is used in the physiological examinations.

6. The number of medical professors in the university is 13. The following is the list, with the subjects of their courses:—

Anatomy	Professor Goodsir.
Anatomical Demonstrations	
Practical Anatomy	
Comparative Anatomy	
Institutes of Medicine	Dr. Bennett.
Histology	
Chemistry	Dr. Gregory.
Practical Chemistry	
Analytical Chemistry	
Botany	Dr. Balfour.
Practical Botany and Vegetable Histology, with Demonstrations in the Botanic Garden and in the country round Edinburgh	
Natural History	Dr. Allman.
Demonstrations in Natural History in the Museum and in the country	
Materia Medica, Dietetics, and Pharmacy	Dr. Christison.
Surgery, with Demonstrations in Hospital Wards	Professor Miller.
Clinical Surgery in the Royal Infirmary	Professor Syme.
Practice of Medicine	Dr. Laycock.
General Pathology	Dr. Henderson.
Midwifery	Dr. Simpson.
Practical Midwifery in Hospital	
Medical Jurisprudence	Dr. Traill.
Clinical Medicine in the Royal Infirmary	Drs. Christison, Bennett, and Laycock.
Military Surgery	At present vacant.

(The chair was lately held by Sir George Ballingall.)

7. Three examinations are required for each degree of M. D., viz., 1. A written and oral examination in Latin, taken usually by candidates in the month of October, at the commencement of their medical curriculum. 2. A written and oral examination on anatomy, chemistry, institutes of medicine, botany, and natural history, at the end of the third session of medical study; the time allowed for the written examination being eight hours, during which one or more professors are present, and the average time for the oral examination of each candidate being one hour and a half. 3. A written and oral examination on materia medica, dietetics, pharmacy, surgery, and clinical surgery, practice of medicine, and clinical medicine, general pathology, midwifery, medical jurisprudence, and prescriptions, at the end of the fourth annus medicus; the time occupied being the same as in the second examination. Finally, there is a public disputation

between each candidate and one of the professors on the subject of his thesis, the day before the degree of M. D. is publicly conferred by the Senatus.

(A copy of the printed Latin exercise, and of the questions given to the candidates in the session 1854-55, is given in the Appendix to this Return.)

8. The proportion of rejected to successful candidates for each degree is on an average one to five.

9. The fee for each degree is 25 *l.*, which includes 10 *l.* for the stamp, 3 *l.* 9 *s.* for library fees and vellum, 1 *l.* 1 *s.* for the anatomical museum, and the fees paid to the examiners.

10. As regards the privileges conferred by the degree of M. D., the following are the words of the diploma granted by the Senatus:—* * * * * "Amplissimam potestatem medicinam ubique gentium legendi, docendi, faciendi concessam, aliaque omnia privilegia, immunitates, jura quæ hic aut usquam alibi ad doctoratus apicem evectis concedi solent." There is no express law decision to fix the privileges of graduates of medicine; but from the terms of the charter of the Faculty of Physicians and Surgeons of Glasgow in 1599, and that of the Royal College of Physicians of Edinburgh in 1681, as well as from the proceedings in an action by the Glasgow Faculty of Physicians and Surgeons against the University of Glasgow, it appears that prior to these charters, graduates of universities were the only practitioners now known to have practised medicine in Scotland, and that their right of practice in Glasgow and in Edinburgh was carefully reserved in these charters.

Fuller particulars on the point are given in the following extract from the Memorial of the Senatus Academicus, relative to two proposed Bills for regulating the medical profession, submitted to the Right honourable the Secretary of State for the Home Department, 1 June 1855.

"While the Senatus desire to save the Right honourable Secretary's time and trouble as far as possible on this subject, there is one branch of it concerning which they are imperatively called on to instruct him fully, and that is, the present legal rights of practice possessed by the graduates of the Universities of Scotland.

"Last summer (1854), while the London Medical Graduates Bill was passing through Parliament, delegates from the Edinburgh College of Surgeons circulated among Members of Parliament and others a printed statement, in which, among other allegations hostile to the Universities of their own country, they affirmed, that Scotch medical graduates possess no legal right of practising any branch of medicine, even in Scotland.

"The universities had no opportunity of contradicting this affirmation at the time. But the Senatus observe that in the Draft Medical Bill, lately put before the Home Secretary of State, the 'Statement Explanatory' attached to the draft denies its accuracy, and refers the Secretary to a law case which settled the point in 1834-1840.

"The Edinburgh College of Surgeons, in resolutions very recently transmitted by them to the Right honourable Secretary, adopt and repeat the error of their delegates, and they support it by copious extracts from the case alluded to. The Faculty of Physicians and Surgeons of Glasgow, in similar recent resolutions, follow the same course, and they also quote from the evidence of a member of this Senatus, Dr. Christison, before a Committee of the House of Commons in 1848, to show that at that time he did not think that Scottish graduates had any legal right of practising medicine in Scotland.

"The following statements will prove that these two bodies corporate are in error:

"1. The result of the action of the Faculty of Physicians and Surgeons of Glasgow against the University of Glasgow, the case which has been quoted in both series of resolutions, was to decide that in the district of the faculty charter, viz., three counties and one town, comprising now about a third of the population of Scotland, the faculty had alone the right to examine and license persons practising surgery, and to interdict others from such practice.

"It also decided, however, that graduates of reputable universities had the right of practising medicine within the same bounds. An incidental question was started, but not settled, whether it might not even be that no others except such graduates had a right to practise medicine by the faculty charter. It was clearly laid down, however, both by the Court of Session and the House of Lords, that if any person practising medicine were challenged by the faculty for so doing, the production of a university diploma was a sufficient answer.

"The faculty charter of 1599, ratified by Parliament in 1672, after conveying the right of licensing in surgery, says of medicine, 'Fourthly, it shall not be lawful to any manner of persons, within the foresaid bounds, to exercise medicine without a testimonial of a famous university where medicine is taught, or at the leave of our and our dearest spouse's chief medicinar.' And in the course of the action the Scottish bench delivered a unanimous opinion, in which that clause in the charter is thus commented on: 'The grantees [the faculty] are empowered to examine every person within their bounds practising surgery. To that privilege there is no exception whatever. It is otherwise with respect to medicine. Whether the faculty have or have not acquired by usage a right to examine in medicine, which was not conferred by charter, a testimonial or diploma from a university where it is taught, constitutes a good title to practise, and to exempt the possessor from the necessity of

of obtaining a licence from the faculty.'—[*Shaw's Cases decided in the Court of Session*, 1834, p. 19.] Again, when referred to at a later period by the House of Lords, during the appeal of the case, the Scotch Court of Session, in their 'Consultation,' speak of the charter in these words: 'No person, under the exemptions in the grant, was to practise surgery without a licence from the grantees or their successors, or medicine, without a licence from a university or the Royal physicians.' 'Nothing is said in the grant as to the grantees having a right to give testimonials for the exercise of medicine; that was reserved for the universities and the Royal physicians.'—[*Robinson's Appeal Cases*, 1840, p. 410.] There are many other passages in the judgments of the Scotch Court and the House of Lords confirming these views, and none contradictory.

"What change may have been made in the late amended charter of the faculty, by which they are said to have surrendered their exclusive privileges, the Senatus do not know; but no alteration in it can annihilate the fact that graduates of universities were for two centuries and a half legal practitioners of medicine, and probably the only legal practitioners of medicine, by statute, in one-third, at all events, of Scotland.

"2. The only other part of Scotland in which the practice of medicine has been regulated by statute is the city of Edinburgh, the district embraced by the charter of the College of Physicians. In this charter, too, an exception is made in favour of the medical graduates of Scotland; so that they acquire the right of practising medicine by a mere form. After several passages on this point, not very clear in their meaning, and one of them apparently requiring such graduates to become licentiates of the college only if they reside, and not if they merely practise, in the city, the charter adds, 'It shall be binding on the said college to license any doctor of medicine of the said universities,' viz., the four universities of Scotland, 'without any previous examination, and simply on producing to the president his diploma or admission to the degree.'

"It is thus evident that on the only occasions on which the practice of medicine has been regulated by statute in Scotland, great care has been taken to reserve important rights, in regard to the practice of medicine, to the graduates of universities, and among these to the graduates of the universities of Scotland.

"3. The Edinburgh College of Surgeons, and the Glasgow Faculty, seem unaware that there is another way, besides statute, of acquiring a legal right of practising medicine. And nevertheless it stares them in the face in the judgment, from which they have so freely quoted only what they found agreeable. 'A University diploma confers no civil or municipal right, except in so far as it is allowed by statute or usage.'—[*Shaw's Cases*, &c., 1834, p. 20.] They appear to have thought that the word 'usage' has here no meaning; whereas they ought to know that usage may make as good a law as any statute.

"It cannot be denied, that by usage the graduates of universities have possessed immemorially the right of practising medicine in every part of Scotland. Before the date of the Glasgow Faculty's charter, which is the first to give them notice in a statute, they were, as in all parts of the Continent, the only recognised practitioners of medicine. Their being noticed in that charter, and their rights reserved, establishes that graduates were so recognised in 1599 at all events. As there could have been no charter incorporating surgeons, unless recognised surgeons had existed, so there could not have been a reservation of graduates' rights, unless there had been graduates exercising those rights. So, too, the same argument applies on the occasion of the incorporation of the College of Physicians. It is clear, in short, from that charter, that there were Scotch graduates in 1681 practising medicine in and around Edinburgh.

"But it has never been doubted that doctors of medicine have been in use to practise medicine throughout Scotland without any other qualification. They have the usage which two centuries and a half of statutory right establish in the Glasgow Faculty's bounds. In the remaining two-thirds of the population, with the exception of the city of Edinburgh, there has never been any corporate right to interfere with them; and, accordingly, they have been everywhere in these parts received by the public as the most highly qualified of practitioners, as far back as it is possible to trace the history of the medical profession in Scotland. In Edinburgh itself, mere graduates have practised medicine, even since the erection of the College of Physicians, without being subjected to the very limited restriction which the College charter allows; so that now it is extremely doubtful whether the College could legally enforce that provision of its charter in face of such usage. It is certain that a sixth part of the medical practitioners of Scotland are at the present moment practising without any other than a university qualification. According to the Medical Directory, there are about 1,300 practitioners in Scotland, and 980 of these have themselves returned their medical titles to the editor for publication. It thence appears that 136 of the latter denomination have no other professional title than a university degree; so that 180 of the whole number in the country may be safely assumed to be similarly circumstanced."

11. The examiners are the medical professors above enumerated. They are *ex officio* examiners under the academical control of the Senatus, and of the Patrons (the Town Council of Edinburgh). Should any professor in one division be incapacitated from doing his duty as an examiner, the Senatus, with the consent of the Patrons, appoint a substitute from the professors belonging to the other division of examiners.

The returns, contained in this and the four preceding pages, having been produced to the Senate of the University and duly considered, are attested by

Edinburgh, 5 May 1856. *John Lee*, Principal.

Appendix to Replies of the Senatus Academicus.

Medical Degree.—Latin Examination.

Wednesday, 25th October 1854.

C. Corn. Taciti, Agricolae, Cap. xxx.

Galgacus apud contractam multitudinem proelium poscentem, in hunc modum locutus fertur:—Quotiens causas belli et necessitatem nostram intueor, magnus mihi animus est, hodiernum diem, consensumque vestrum, initium libertatis totius Britanniae fore. Nam et universi servitutis expertes, et nullae ultrà terrae, ac ne mare quidem securum, imminente nobis classe Romanâ: ita proelium atque arma, quæ fortibus honesta, eadem etiam ignavis tutissima sunt. Priores pugnæ, quibus adversùs Romanos variâ fortunâ certatum est, spem ac subsidium in nostris manibus habebant: quia nobilissimi totius Britanniæ, eóque in ipsis penetralibus siti, nec servientium litora aspicientes, oculos quoque a contactu dominationis inviolatos habebamus. Nos, terrarum ac libertatis extremos, recessus ipse ac sinus famæ in hunc diem defendit; nunc terminus Britanniae patet; atque omne ignotum pro magnifico est. Sed nulla jam ultrà gens, nihil nisi fluctus et saxa, et infestiores Romani: quorum superbiam frustra per obsequium et modestiam effugeris: raptores orbis, postquam cuncta vastantibus defuere terrae, et mare scrutantur: si locuples hostis est, avari: si pauper, ambitiosi; quos non oriens, non occidens, satiaverit: soli omnium, opes atque inopiam pari affectu concupiscunt: auferre, trucidare, rapere falsis nominibus, *imperium;* atque, ubi solitudinem faciunt, *pacem* appellant.

Virgilii, Æneidos, Lib. III., 571–583.

Portus ab accessu ventorum immotus, et ingens
Ipse; sed horrificis juxta tonat Aetna ruinis,
Interdumque atram prorumpit ad aethera nubem,
Turbine fumantem piceo et candente favilla;
Attollitque globos flammarum, et sidera lambit:
Interdum scopulos avulsaque viscera montis
Erigit eructans, liquefactaque saxa sub auras
Cum gemitu glomerat, fundoque exaestuat imo.
Fama est, Enceladi, semiustum fulmine, corpus
Urgeri mole hac, ingentemque insuper Aetnam
Impositam, ruptis flammam exspirare caminis;
Et, fessum quoties mutet latus, intremere omnem
Murmure Trinacriam, et coelum subtexere fumo.

Cicero, de Natura Deorum. Lib. II., Cap. xlvii.

Age, ut a coelestibus rebus ad terrestres veniamus: quid est in his, in quo non naturae ratio intelligentis appareat? Principio, eorum, quae gignuntur e terra, stirpes, et stabilitatem dant iis, quae sustinent, et ex terra succum trahunt, quo alantur ea, quae radicibus continentur: obducunturque libro, aut cortice trunci, quo sint a frigoribus et caloribus tutiores. Jam vero vites sic claviculis adminicula, tanquam manibus, apprehendunt, atque se ita erigunt, ut animantes. Quin etiam a caulibus, brassicisque, si prope sati sint, ut a pestiferis et nocentibus refugere dicuntur, nec eos ulla ex parte contingere.

Animantium vero quanta varietas est! quanta ad eam rem vis, ut in suo quaeque genere permaneant! quarum aliae coriis tectae sunt, aliae villis vestitae, aliae spinis hirsutae: pluma alias, alias squama videmus obductas: alias esse cornibus armatas, alias habere effugia pennarum. Pastum autem animantibus large et copiose natura eum, qui cuique aptus erat, comparavit. Enumerare possum ad eum pastum capessendum, conficiendumque, quae sit in figuris animantium, et quam solers subtilisque descriptio partium, quamque admirabilis fabrica membrorum.

Medical Degree.—Latin Examination.

Wednesday, 18th April 1855.

Celsus. Med., Lib. VII., Cap. xxvi.

Res vero interdum cogit emoliri manu urinam, cum illa non redditur, aut quia senectute iter ejus collapsum est, aut quia calculus, vel concretum aliquid ex sanguine intus se opposuit: ac mediocris quoque inflammatio sæpe eam reddi naturaliter prohibet. Idque non in viris tantummodo, sed in feminis quoque interdum necessarium est. Ergo aeneæ fistulæ fiunt; quæ, ut omni corpori, ampliori minorique sufficiant, ad mares, tres; ad feminas, duæ medico habendæ sunt: ex virilibus maxima, decem et quinque digitorum; media, duodecim; minima, novem: ex muliebribus major, novem; minor, sex. Incurvas vero esse eas paulum, sed magis viriles oportet, lævesque admodum; ac neque nimis plenas, neque nimis tenues. Homo tum resupinus eo modo, quo in curatione ani figuratur, super subsellium aut lectum collocandus est. Medicus autem a dextro latere, sinistra quidem manu

manu colem masculi continere, dextra vero fistulam demittere in iter urinæ debet: atque ubi ad cervicem vesicæ ventum est, simul cum cole fistulam inclinatam in ipsam vesicam compellere, eamque, urina reddita, recipere.

Lucretius, De Rerum Natura, Lib. II., 833–840.

Postremo, quoniam non omnia corpora vocem
Mittere concedis, neque odorem; propterea fit,
Ut non omnibus attribuas sonitus, et odores:
Sic, oculis quoniam non omnia cernere quimus,
Scire licet, quædam tam constare orba colore,
Quam sine odore ullo quædam, sonituque remota:
Nec minus hæc animum cognoscere posse sagacem,
Quam quæ sunt aliis rebus privata, notisque.

Gregorius. Conspect. Med., Sect. MCCCXLV.

Sæpe etiam prosunt variæ exinanitiones arte concitatæ, suppressis nimirum vel minutis saltem aliis exinanitionibus morbosis, et prius valde molestis, fortasse etiam vix aliter sistendis. Hoc modo, ad firmandam alvum diu et pertinaciter fluentem, copiosus sudor sæpe utilis, interdum prorsus necessarius; et alvi purgatio, ad reprimendos nimios sudores, vel ingentem salivæ fluxum aliquando bonum remedium.

Medical Degree.—First Examination.

Saturday, 21st April 1855.

Anatomy.

1. Describe methodically the parts which come into view when the mylo-hyoid muscle is raised; including in the description the distribution of the vessels and nerves.

2. Give the structure of the hepatic lobule, with the arrangement of the vessels and ducts in and around it.

3. What are the anatomical characters of elastic texture?

Chemistry.

1. How is nitrogen prepared? What are its properties? Mention its specific gravity, its symbol, and its equivalent. State where, and in what forms of combination, it occurs, and what are its uses, in the economy of nature.

2. What is lime? Which compounds of lime are found in the mineral kingdom? Give the formulæ and chief properties of these compounds, and mention the uses to which they are applied. What is the best test of the presence of lime in solutions, such as natural or mineral waters?

3. Mention the tests by which the presence of lead and copper may be detected in solutions, and state what remedial measures, or what antidotes ought to be used in cases of poisoning by these metals.

Medical Degree.—First Examination.

Monday, 23d April 1855.

Institutes of Medicine.

1. What do you understand by the function of nutrition?

2. What are the functions of the fourth, fifth, and sixth pairs of cerebral nerves?

3. In what does cancer differ from other morbid growths?

Botany.

1. Give the characters of the subclass corollifloræ, and of its two subdivisions, mentioning a natural order in each subdivision. What are the points of difference between scrophulariaceæ and labiatæ?

2. Mention some natural orders which characterise cold climates, and others which abound in hot climates.

3. Describe the parts which enter into the composition of the fertilised ovule, commencing externally.

Natural History.

1. The leading characters of Cuvier's divisions of carnivorous and rodent mammals.

2. General characteristics of the three classes of articulata,—annelides, crustaceans, and insects.

3. Distinctive characters of Humboldt's classification of rocks into eruptive or igneous, and sedimentary rocks.

Medical Degree.—Second Examination.

Tuesday, 12th June 1855.

Materia Medica.

1. State the distinctive sensible and chemical properties of acetate of lead, acetate of potash, and acetate of soda.

2. Describe the physiological actions, in large and in small doses, of the salts of iron.

3. State the treatment of ascites, when uncombined with other dropsical effusions.

Surgery.

1. State the arguments for and against tracheotomy in croup.

2. State the signs and treatment of glaucoma.

3. The erectile tumour; its nature and cure.

Midwifery.

1. The various means of physical diagnosis in uterine diseases, and the principal uses of each.

2. The treatment, medical and surgical, of multilocular ovarian dropsy.

3. The treatment of accidental and unavoidable hæmorrhage before and during labour.

Medical Degree.—Second Examination.

Wednesday, 13th June 1855.

Practice of Physic.

1. What is meant by acute tuberculosis; what are the parts in the thorax and abdomen especially liable to such changes; and how is it denoted in each?

2. In what internal parts, and in what conditions of the body, is inflammation from cold apt to be attended with dropsical effusion, extending rapidly to a distance from the inflamed part?

3. What are the diagnostic marks of the first stage of hydrocephalus, or of tubercular deposition, within the cranium?

Legal Medicine.

1. Detail the mode of examining the body of a young infant found dead, to find whether it had been born alive and died a natural death.

2. Detail the symptoms of the poison of lead, and how to detect its administration by the mouth.

General Pathology.

1. Enumerate the various circumstances under which albumen may be present in the urine.

2. What are the causes of a morbidly dark, and of a morbidly florid colour of the blood?

3. Specify the conditions of the blood which may occasion hemorrhage, and the manner in which they do so.

Prescriptions.

Prescriptions.

(The names, quantities, and directions to be written in Latin words, without contractions.)

1. Prescribe an antacid and anodyne mixture for a case of gravel with lithic diathesis.
2. Prescribe an astringent and gently anodyne mixture for a child five years old, with diarrhœa and suspicion of ulcerated bowels.
3. Prescribe corrosive sublimate as an alterative.

Medical Degree.—Latin Examination.

Wednesday, 4th July 1855.

Lucretius. Lib. II., 333.

Nunc age jam deinceps cunctarum exordia rerum,
Qualia sint, et quam longe distantia formis,
Percipe, multigenis quam sint variata figuris;
Non quod multa parum simili sint prædita forma,
Sed quia non vulgo paria omnibus omnia constant.
Nec mirum; nam cum sit eorum copia tanta,
Ut neque finis (uti docui) neque summa sit ulla;
Debent nimirum non omnibus omnia prorsum
Esse pari filo, similique affecta figura.

Gregorii, Conspectus Medicinæ Theoreticæ, Cap. XXII., DCCCLXXV.

Imprimis igitur, ingens debilitas, tum subita tum usque augescens, ita ut æger neque se movere, neque sustinere ut solebat in lecto, neque demum loqui, neque cibum sumere aut devorare possit, cadente scilicet maxilla, et vi propria gulæ pereunte; tremores, aut contractiones, aut convulsiones musculorum aut artuum; defectus vel amissio sensus cujusvis, sive externi sive interni, præsertim visus vel tactus; stupor, torpor, delirium grave, in plerisque morbis, acutis pariter atque vetustis, mala signa sunt.

Celsus. Medicinæ, Lib. VII., XVI.

Nonnunquam autem venter ictu aliquo perforatur; sequiturque, ut intestina evolvantur. Quod ubi incidit, protinus considerandum est, an integra ea sint; deinde, an iis color suus maneat. Si tenuius intestinum perforatum est, nihil profici posse, jam retuli. Latius intestinum sui potest: non quod certa fiducia sit; sed quod dubia spes, certa desperatione sit potior: interdum enim glutinatur. Tum, si utrumlibet intestinum lividum, aut pallidum, aut nigrum est, quibus illud quoque necessario accedit, ut sensu careat, medicina omnis inanis est.

Medical Degree.—First Examination.

Monday, 9th July 1855.

Anatomy.

1. Describe the ankle joint.
2. Describe the deep femoral artery; and enumerate its anastomoses.
3. Describe the ultimate structure of the cortical portion of the kidney.

Chemistry.

I. Give the formulæ of the following compounds:
   1. Ether, or oxide of ethyle.
   2. Alcohol, or hydrated oxide of ethyle.
   3. Aldehyde, or hydrated oxide of acetyle.
   4. Acetic acid, or hydrated teroxide of acetyle.
   5. Ethylamine, or amidide of ethyle.

State also how ether is formed from alcohol; how aldehyde is formed from alcohol; and how acetic acid is formed from aldehyde.

II. Describe the method by which anhydrous grape sugar is converted into lactic acid, or what is called the lactic fermentation; giving the formula of the sugar, and also that of lactic acid, viewed as a bibasic acid.

III. Mention the different classes of volatile bases derived from ammonia by the partial or total substitution of radicals belonging to the series of methyle, ethyle, &c., or of the series of phenyle, for the three atoms of hydrogen in ammonia. Explain their analogy with ammonia in constitution, and give one example at least of each of the three classes of bases, amide bases, imide bases, and nitryle bases.

Medical Degree.—First Examination.

Tuesday, 10th July 1855.

Institutes of Medicine.

1. What are the general functions of cells in animals and plants?

2. What are the facts and experiments which have led to the conclusion that sugar is a normal secretion of the liver?

3. State the principal arguments by which it has been endeavoured to be maintained, that the spleen is concerned in the formation of blood corpuscles.

Botany.

1. Describe the parts which constitute the nutritive and reproductive organs in a moss, such as polytrichum: *a.* Its prothallus; *b.* its leafy stem; *c.* its embryogenic organs; *d.* its fully developed fructification.

2. Give the classes and sub-classes of the natural system, with short diagnostic characters of each.

3. Thalamifloral exogen, with two caducous sepals, four petals, indefinite stamens, a unilocular siliquæform capsule, having parietal placentas, and albuminous seeds:—Give the natural order to which the plant belongs, and mention any additional characters of the order, as well as its properties and geographical distribution.

Natural History.

1. Characters of ruminant mammals; distinguishing the genera *with* and *without* horns, and describing the two kinds of horns possessed by the former.

2. Describe the characters of raptorial birds, and mention the principal genera.

3. Characters of the following orders of Reptilia:—Chelonians, Saurians, Ophidians, Batrachians.

Medical Degree.—Second Examination.

Monday, 16th July 1855.

Materia Medica.

1. State the distinctive sensible and chemical properties of calomel, corrosive sublimate, and biniodide of mercury.

2. Describe the physiological actions of the soluble salts of copper, both in large quantity and in medicinal doses.

3. State the medicinal and dietetic treatment of uric acid gravel.

Surgery.

1. Surgical anatomy of the subclavian artery from its origin to the clavicle.

2. Operation for excision of the elbow joint.

3. The best auxiliaries to the taxis in hernia.

Midwifery.

1. The diagnosis, pathology, and treatment of uterine fibrous tumours.

2. The management of a twin labour.

3. The treatment of puerperal insanity.

Medical Degree.—Second Examination.

Tuesday, 17th July 1855.

Practice of Physic.

1. What texture, in the abdomen, is peculiarly liable to inflammation during continued fever, and what part of this texture?

2. What are the most powerful remedies that can be used for these abdominal symptoms during fever, and the most important indications for each?

3. How are the erythematic, the pustular, vesicular, and scaly cutaneous diseases distinguished? Name one of each genus.

Pathology.

1. The pathology of gastric acidity.

2. The physical conditions which give rise to the metallic or amphoric sounds in the chest.

3. The pathology of red colour of the urine, and the means of distinguishing the colour imparted by vegetable matters from that by blood.

Legal Medicine.

1. Some of the principal manufactures which evolve noxious or offensive effluvia by the aid of heat; and the modes of abating the nuisance.

2. Poisoning by opium or its preparations—treatment—modes of detection, with the best tests.

Prescriptions.

(The names, quantities, and directions, to be written in Latin words without contractions.)

1. Prescribe an antispasmodic draught for the fit of spasmodic asthma.

2. Prescribe oil of turpentine as a cathartic.

3. Prescribe a soothing lotion for erythema and erysipelas.

University of Glasgow.

1. Number of Medical and Surgical Degrees granted, &c.:—

	1846.	1847.	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.
Degrees of M. D. conferred by University -	38	32	41	34	38	28	27	30	31	30
Ditto of C. M. -	5	1	2	- -	1	1	13	4	2	1

The degree of bachelor of medicine is not at present conferred by this University. There is no means of ascertaining accurately from any record of the University what proportion of the medical graduates may have previously obtained elsewhere diplomas or licences to practise.

2. Duration of the Period of Professional Study required of the Candidates for the said Degrees.
According to the Senate regulations, the duration of professional study required extends over a period of not less than four years, or four winter sessions.

3. Minimum Age of Candidates.
Twenty-one years.

4. Subjects in which Candidates are Examined.
1. An examination as to proficiency in the Latin language; 2. The professional examination in two parts, the first comprehending the subjects of anatomy, chemistry, physiology, and botany; the second comprehending practice of medicine, surgery, materia medica and pharmacy, midwifery, and forensic medicine.

5. Mode of conducting the Examinations, &c.
Principally *vivâ voce*, but partly also in writing, and by means of demonstrations.

6. Number of Medical Professors, and the Subjects of the Courses on the different Branches of Medical Study.
Nine, besides the lecturer on the eye. The following are the subjects of the several courses of lectures and instruction delivered by them: anatomy, practical anatomy with

with demonstrations, chemistry, practical chemistry, botany, institutes of medicine, materia medica and pharmacy, surgery, medicine, midwifery, forensic medicine.

7. Whether more than One Examination for each Degree, &c.
Besides the Latin examination, there are two others, which may be taken either the same year, or at a longer or shorter interval, extending to two years, at the option of the candidate.

8. Proportion of Rejected to Successful Candidates for each Degree.
About one-tenth of the candidates are rejected or delayed.

9. Fees exacted for each Degree.
For the degree of M. D. the fee is 25 *l.* 3 *s.*, of which 10 *l.* are paid for Government stamp on the diploma. For the degree of M. C. the fee is 10 *l.* 10 *s.*

10. Privileges conferred by each Degree.
All the privileges to which the holder of a medical degree conferred by any Scotch University is entitled.

11. Who are the Examiners in the several Subjects of Examination respectively; when, for what Period, and by whom Appointed.
The medical professors, appointed annually by the Senate of the University.

3 June 1856. *Duncan H. Weir*, M. A.
Clerk of Senate.

University of St. Andrew's.

Returns from the University of *St. Andrew's* regarding Medical Degrees.

1. Number of Degrees, M. D.
In 1846, 51 degrees; in 1847, 39 degrees; in 1848, 22 degrees; in 1849, 30 degrees; in 1850, 56 degrees; in 1851, 48 degrees; in 1852, 65 degrees; in 1853, 68 degrees; in 1854, 65 degrees; in 1855, 53 degrees; the average number for the last 10 years being 49·7. We have no trustworthy data to answer the second part of the questions for 1846; but of the 446 gentlemen who obtained the M. D. degree from 1847 to 1855, inclusive, all excepting 21 previously held a licence or diploma.

2. Duration of Period of Study.
Fellows, members, and licentiates of the Royal Colleges of Surgeons of England, Edinburgh, and Dublin; of the Royal College of Physicians of London; of the Faculty of Physicians and Surgeons of Glasgow; and of the London Apothecaries' Company, are eligible as candidates for the degree of doctor of medicine on producing their diploma or licence.
Candidates not holding any of the qualifications enumerated in the above clause must produce satisfactory proof that they have regularly attended lectures delivered by professors in some University, or by Fellows of the Royal Colleges of Physicians or Surgeons of London, Edinburgh, or Dublin, for four complete winter sessions, or for three winter and three summer sessions, on the following branches:

1. Anatomy	2 courses of six months each.
2. Practical Anatomy or Dissections	12 months.
3. Physiology	1 course of six months.
4. Chemistry	1 ditto - ditto.
5. Practical Chemistry	1 ditto of three months.
6. Materia Medica and Pharmacy	1 ditto - ditto.
7. Midwifery and Diseases of Women and Children,	1 ditto - ditto.
8. Surgery	1 ditto of six months.
9. Clinical Surgery	1 ditto - ditto.
10. Practice of Medicine	1 ditto - ditto.
11. Clinical Medicine	1 ditto - ditto.

and that they have diligently attended for at least two entire years the medical practice in some public hospital in Great Britain or Ireland, containing not less that 100 beds, and having a regular establishment of physicians, as well as surgeons.

3. Minimum Age of Candidates.
Twenty-one years. In reality, few candidates present themselves under their twenty-fourth year; and the average age is about 30. The average age at the last examination was found to exceed 32.

4. Subjects of Examination.
Latin, chemistry, materia medica, anatomy and physiology, pathology and practice of medicine, the principles of surgery, and midwifery.

5. Mode

5. Mode of conducting the Examinations.

By written questions and answers for two days, in Latin, chemistry, materia medica, anatomy and physiology, practice of medicine, surgery, and midwifery; and by a subsequent oral examination, in which anatomical preparations, models, and plates are employed, and in which candidates are practically tested on their knowledge of drugs.

6. Number of Medical Professors.

There are professors of anatomy and medicine, and of chemistry. The only regular courses of medical lectures at present delivered are—1, On the institutes of medicine (or physiology); 2, On comparative anatomy and physiology; and 3, On chemistry.

7. Number of Examinations required.

Only one examination, extending, at present, over three or four days, according to the number of candidates.

8. Proportion of Rejected Candidates.

During the last 10 years the successful candidates have been 497, and the rejected ones 70.

Since Dr. Day's appointment to the professorship of medicine in 1849, the examination papers have been printed and published in the medical journals, and candidates of inferior attainments have consequently been deterred from coming forward. Shortly after Dr. Day's appointment, and before the present system of examination became generally known, the rejections were comparatively numerous. On one of these occasions, out of 24 candidates, six were rejected.

9. Fee for the M. D. Degree.

The fee is 25 guineas (26 *l.* 5 *s.*)

10. Privileges of Doctors of Medicine.

The power to grant medical degrees was conferred on the University of St. Andrew's in the year 1413 by a bull of Pope Benedict XIII, in compliance with a petition from King James I of Scotland and the Bishop of St. Andrew's; and the privileges probably do not extend beyond those countries in which the Pope at that period held spiritual sway. The bull or charter was afterwards confirmed by various Scottish Kings, and Acts of Parliament.

11. The Examiners, and the Mode of their Appointment.

Dr. Pyper, the Professor of Latin, examines in the medical classics; Mr. Connell, the Professor of Chemistry, examines in chemistry, and its application to pharmacy and medicine; Dr. Day, the Chandos Professor of Anatomy and Medicine, assisted by Dr. Anderson, examines on the subjects of which he is professor; and Dr. Anderson (the Professor of Medicine in the Andersonian University of Glasgow, and Assistant Examiner to this University) examines in surgery and midwifery. All the examiners are appointed by the University, and that body has, it is presumed, the power of rescinding these appointments at will. The assistant examiner is nominated by the professor of medicine, but the nomination must receive the sanction of the University. These gentlemen constitute the paid staff of examiners; but the examination is open to all the professors, and it frequently happens that one or more of the non-medical professors hold medical degrees, and are willing to assist in the proceedings.

(signed) *James M'Bean*, A. M.
Clerk to the University of St. Andrew's.

University and King's College of Aberdeen.

Return showing the Number of Medical and Surgical Degrees granted by it in each Year, for the last 10 Years; distinguishing the Degree of Bachelor of Medicine from the Degree of Doctor of Medicine; and distinguishing those who, before obtaining such Degrees, had already, elsewhere, obtained Diplomas or Licences to Practise.

1. Degrees in surgery are not conferred by this University.

	1846.	1847.	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.
2. Degrees of M. D. conferred - -	20	31	24	27	45	23	21	23	24	20
3. Number rejected - - - -	4	2	3	6	8	9	9	5	10	4
4. Degrees of M. B. conferred - -	–	–	–	–	–	–	–	2	2	1

5. Of the above, 34 were students who had studied at King's College; 32 of whom, previously to their having the degree of M. D. conferred on them, had obtained the diploma from a Royal College of Surgeons. The remaining 224 were practitioners, all of whom had previously received a diploma from a Royal College of Surgeons, or from an Apothecaries' Company, or from the Faculty of Physicians and Surgeons of Glasgow.

6. The duration of the period of professional study required by students is four years.
Practitioners holding a diploma from another Board must have been in practice during five years, or must have begun the study of the medical profession in or before 1840, and must have completed the curriculum of study prescribed for students, that is, attendance on anatomy, chemistry, materia medica, and pharmacy, practice of medicine, surgery, midwifery, physiology, medical jurisprudence, botany, clinical medicine, surgery, practical anatomy, practical chemistry, during a period of four years. *See* printed copy of curriculum and regulations.

7. The minimum age for graduation is 21 years complete.

8. The subjects of examination are anatomy, chemistry, physiology, practice of medicine, surgery, midwifery, materia medica, and pharmacy, medical jurisprudence, Latin.

9. The examinations are conducted *vivâ voce*; occasionally by demonstration, as by the use of bones and dried preparations; sometimes, though rarely, by written questions and answers.

10. The number of medical lecturers is nine—

One for anatomy and practical anatomy.
One for midwifery.
One for practice of medicine.
One for physiology.
One for medical jurisprudence.
One for chemistry and practical chemistry.
One for materia medica and pharmacy.
One for surgery.
One for botany.

There are also lecturers on clinical medicine and clinical surgery attached to the Royal Infirmary; and, in addition to the above, lectures are delivered on natural history, natural philosophy, and histology.

11. There is only one examination for each degree.

12. The number of rejected candidates during the last 10 years, is 60; that of successful candidates, 233; making the proportion of rejected one for four passed, or very nearly so.

13. The fees for diplomas of M. D. are 26*l.* 5*s.* 6*d.*, inclusive of Government stamp, 10*l.*; expenses, 1*l.* 5*s.* 6*d.* The fees for M. B. are 5*l.* 5*s.*; and on the degree of M. D. being afterwards conferred, the fee is 21*l.* 0*s.* 6*d.*, in all, 26*l.* 5*s.* 6*d.*
The whole fees are returned to unsuccessful candidates.

14. The present Examiners are—

Dr. Fyfe, Professor of Medicine and Lecturer on Chemistry, Examiner on Chemistry and Pharmacy.

Dr. Redfern, Lecturer on Anatomy, Examiner on Anatomy and Physiology.

Dr. Kerr, Lecturer on Surgery, Examiner on Surgery.

Dr. Williamson, Lecturer on the Practice of Medicine, Examiner on Practice of Medicine, Midwifery and Medical Jurisprudence.

The three first have held the appointment for upwards of 10 years; the last during three years. They are appointed by the Senatus of the University.

15. The privileges conferred by degree M. D. are, as stated in the charter, "Medicinam legendi, docendi, dubia interpretandi, et praxin exercendi, idque ubique terrarum."

Aw Fyfe, M. D.,
Professor of Medicine and Chemistry,
Dean of Faculty of Medicine.

King's College, Aberdeen,
9 May 1856.

University and King's College, Aberdeen.

Chancellor—The Right Honourable the Earl of Aberdeen, LL. D.

Lord Rector—The Right Honourable the Earl of Ellesmere, D. C. L.

Assessors to Lord Rector—Robert Grant, Esq., of Tillyfour; Major Cumming Bruce, M. P.; Sir J. Matheson, Bart., M. P.; the Marquess of Stafford.

Principal—

Sub-Principal—David Thomson, M. A.

Secretary—Frederick Fuller, M. A.

Curator of Library—Geo. Ferguson, A. M.

Curator of Museum—Aw. Fyfe, M. D.

Librarian—Robert Bower, M. D.

MEDICAL SCHOOL.

The winter session commences on the first Monday of November, and terminates on the third Friday of April.

Introductory Lecture on the first Monday of November, at Two o'clock, P. M.

SUBJECTS.	LECTURERS.	HOURS.	FEES. £.	s.	d.
Midwifery	Dr. Rainy	8 to 9 A. M.	3	3	–
Anatomical Demonstrations	Dr. Redfern	12 to 1 P. M.	2	2	–
Chemistry	Dr. Fyfe	10¾ to 11¾ A. M.	3	5	6
Materia Medica	Dr. Rattray	9 to 10 A. M.	3	3	–
Practice of Medicine	Dr. Williamson	1 to 2 P. M.	3	3	–
Anatomy and Physiology	Dr. Redfern	2 to 3 P. M.	3	3	–
Surgery	Dr. Kerr	3 to 4 P. M.	3	3	–
Institutes of Medicine (Physiology)	Dr. Christie	4 to 5 P. M.	3	3	–
Summer Session :					
Botany	Rev. J. C. Brown	8 to 9 A. M.	2	2	–
Practical Chemistry	Dr. Fyfe	12 to 1 P. M.	3	5	6
Anatomical Demonstrations	Dr. Redfern	2 to 3 P. M.	2	2	–
Medical Jurisprudence	Dr. Reid	3 to 4 P. M.	2	2	–
Histology	Dr. Redfern	—		—	
Natural Philosophy	David Thomson, M. A.	- - -	2	2	–
Natural History	Rev. J. Longmuir	—		—	

The rooms for practical anatomy are personally superintended by Dr. Redfern.

Students are required to matriculate within the first month of the winter session, and within the first fortnight of the summer session, and no certificate of attendance will be given without such matriculation. The matriculation fee for all the classes is one sum of 5*s.* for the winter, and one of 2*s.* 6*d.* for the summer session.

Chemistry will be taught, as formerly, in King's College; and the other classes in the Medical School, St. Paul's-street.

ROYAL INFIRMARY.

The hospital is open daily at 10 o'clock a. m., and contains upwards of 300 beds. Separate courses on Clinical Medicine and Clinical Surgery are delivered in the hospital twice a week.

Physicians.		*Surgeons.*	
Dr. Dyce.	Dr. W. Williamson.	Wm. Keith, Esq.	David Kerr, Esq.
Dr. Kilgour.	Dr. Nicol.	Wm. Pirrie, Esq.	A. J. Lizars, Esq.

John Cadenhead, Esq., Ophthalmic Surgeon.

Lecturers on Clinical Medicine and Surgery.

Dr. Kilgour. | Wm. Keith, Esq.

Fee for the medical and surgical practice of the hospital, first year, 3*l.* 3*s.*; second year, making perpetual, 3*l.* 3*s.*; or one sum of 5*l.* 5*s.*

Clinical Medicine.—For the first course, 2*l.* 2*s.*; subsequent courses, 1*l.* 1*s.* each.

Clinical Surgery.—For the first course, 2*l.* 2*s.*; subsequent courses, 1*l.* 1*s.* each.

DISPENSARY.

The Aberdeen General Dispensary, Vaccine, and Lying-In Institution is open to the student on application to the medical officers. There are annually about 5,000 patients, either prescribed for at the institution or visited at their own houses.

LUNATIC ASYLUM.

The Asylum contains about 240 patients. A limited number of students are admitted to see the practice. Fee, for a course of three months, 2*l.* 2*s.*

Consulting Physician, Dr. Macrobin. Resident Physician and Superintendent, Dr. Robert Jamieson.

The library of the university contains about 55,000 volumes, and is free to all the students of King's College.

The Medico-Chirurgical Society possesses a valuable medical library of nearly 4,000 volumes, and a reading-room, to both of which, and to all the privileges of junior members, students are admitted on payment of 1*l.* 1*s.* per year, becoming free members after three payments.

Regulations to be observed in granting the Degree of M.B.

I. Students shall be entitled to the degree of M.B., who being of the age of 21 years, and having completed the curriculum appointed for the degree of M.D. (one *annus medicus*, at least, having been passed at King's College), shall, on examination, be found duly qualified; and the fee for such degree shall be five guineas.

II. Those who have obtained the degree of M.B. shall be entitled to make application, within 12 years, for the degree of M.D., which degree shall be conferred by the Senatus, without further examination, on the candidates producing satisfactory evidence that they have creditably pursued the medical profession in the interval; and for the degree of M.D., thus conferred, the additional fee of 21*l.* 0*s.* 6*d.* shall be charged.

Regulations to be observed in granting the Degree of M.D.

I. Candidates for the degree of M.D. must be of the age of 21 years complete, previous to examination.

II. Candidates must produce satisfactory certificates of moral character, and of having studied the classics and mathematics at a university, or at an academy of acknowledged reputation.

III. All candidates, with the exceptions mentioned below, must have been engaged in the study of medicine for at least four years, one of which must be passed at King's College, Aberdeen; and must produce evidence of having attended in some recognised school of medicine the following course of lectures:

Six Months' Courses.	
Anatomy	2 courses.
Chemistry	1 course.
Materia Medica	1 course.
Surgery	1 course.
Institutes of Medicine and Physiology	1 course.
Practice of Medicine	1 course.
Midwifery	1 course.

Three Months' Courses.	
Dissections	2 courses.
Practical Chemistry	1 course.
Medical Jurisprudence	1 course.
Clinical Surgery	1 course.
Botany	1 course.
Clinical Medicine	2 courses.

Attendance on at least two of the above courses during each session is requisite to constitute an *annus medicus.*

Certificates of attendance on a *six months' course* of chemistry, *previous* to the commencement of medical study, will be received.

For those who have a diploma of A.M., attendance on anatomy during the fourth session of the curriculum of arts, and on a full course of chemistry, will be considered as one medical session.

In addition to the above, every candidate must have attended for two years the wards of an hospital containing 100 beds; and, during three months, a shop or dispensary for the compounding of medicines.

Previous to commencing the medical examination, candidates not having the degree of A.M. will be required to show that they have a competent knowledge of the Latin language, by translating a passage from Celsus.

IV.—The preceding regulations will be strictly enforced in the case of all *students* who commenced their medical studies at a period subsequent to 1st October 1840. But *practitioners* who possess a licence or diploma from any of the Royal Colleges of Physicians or Surgeons, or from the Apothecaries' Company, and who have been engaged for at least five years in the practice of medicine, will be admitted to examination on producing their licence

licence or diploma, along with satisfactory evidence of good moral character, and of having studied the classics at a university, or at an academy of acknowledged reputation.

V.—*Practitioners* who commenced their medical studies before October 1840, and who have not been in practice for five years, will be admitted to examination under the conditions prescribed in Section III., with the exception of a year's residence at King's College.

VI.—Fees, 26*l.* 5*s.* 6*d.*

*** The University and King's College is the only institution in Aberdeen which has a legal power of granting degrees in medicine. All medical diplomas purporting to be from the University of Aberdeen, and not signed by the principal and professors of King's College, as given below, are illegal and void.

SUBJECTS.	PROFESSORS.	FEES.
Faculty of Arts:		£. s. d.
Junior Greek	P. C. Campbell, A.M.	3 3 –
Senior Greek	- - ditto	1 1 –
Junior Latin	George Ferguson, A.M.	2 12 6
Senior Latin	- - ditto	1 5 –
Junior Mathematics	Frederick Fuller, M.A.	3 3 –
Senior Mathematics	- - ditto	1 1 –
Natural Philosophy	David Thomson, M.A.	3 3 –
Moral Philosophy and Logic	Hercules Scott, LL.D.	3 3 –
Chemistry	Andrew Fyfe, M.D.	2 2 –
Faculty of Divinity:		
Divinity	R. M'Pherson, D.D.	—
Oriental Languages	Andrew Scott, A.M.	—
Faculty of Law:		
Civil Law	Patrick Davidson, LL.D.	—

King's College, Aberdeen, September 1855.

Frederick Fuller, Secretary.

University of Marischal College, Aberdeen.

Return respecting Medical Degrees granted in the University of Marischal College, *Aberdeen*, during the last Ten Years; viz., from 1846 to 1855 inclusive.

YEARS.	NUMBER OF MEDICAL DEGREES.			Number of those who had previously obtained Diplomas or Licences to Practise.
	Bachelors of Medicine.	Doctors of Medicine.	Total.	
1846	3	3	6	4
1847	3	6	9	6
1848	2	0	2	1
1849	4	7	11	9
1850	1	3	4	1
1851	7	9	16	9
1852	8	11	19	10
1853	17	18	35	18
1854	18	18	36	22
1855	8	15	23	14

No degrees in surgery have been conferred.

The duration of professional study required of the candidates is four years, comprehending four winter sessions and two summer sessions.

The minimum age for the degree of M.B. is 21, and the minimum for M.D. 22.

The candidates are examined in anatomy, physiology, botany, chemistry, materia medica, medical jurisprudence, midwifery, surgery, and practice of medicine. For those who are not masters of arts, nor already possessed of a diploma or licence, there is a preliminary examination in Latin, and on the etymology of medical terms.

The examinations are conducted partly *vivâ voce*, partly by written questions and answers, and partly by demonstrations; sometimes also partly by dissections.

There are four medical professors, viz., of practice of medicine, anatomy, surgery, and chemistry; and five medical lecturers, viz., on physiology, materia medica, botany, midwifery, and medical jurisprudence.

It is optional to the candidate to take his professional examinations at one term, at two terms, or at three. The first must not be before the end of the second year of studies, and the other two must be at intervals of a year. The preliminary examination may be taken at the end of the first year.

The proportion of rejected to successful candidates is as 1 to between 7 and 8.

The fees for the degree of bachelor of medicine amount to 16 *l.* 5 *s.*, including 1 *l.* for diploma and servant; those for the degree of doctor of medicine to 26 *l.* 5 *s.*, including the said 1 *l.*, and 10 *l.* for the stamp; but candidates who have taken all their medical education here are exempted from fees, except the said 1 *l.* and 10 *l.*

The privilege conferred by the degree is understood to be that of exercising the medical profession, in all its branches, in Scotland, and wherever else the laws of other corporations do not interfere. The diploma runs thus: "Ei per has literas medicinam excercendi hic et ubique terraram potestatem deferimus, omnibusque et singulis illius gradûs privilegiis, immunitatibus, et honoribus eum frui jubemus."

The examiners are the professors and lecturers on the branches above specified, each examining on his own subject, in presence of the Senatus Academicus. They are appointed by the Senatus Academicus, at their admission to office, and for the periods of their incumbency.

John Cruickshank,
Secretary.

Marischal College, Aberdeen,
11 June 1856.

Royal College of Physicians, Edinburgh.

Return from the Royal College of Physicians, *Edinburgh*, as to Medical Licences granted for the last Ten Years.

I. *Number of Licentiates, Members, and Fellows admitted each Year for the last Ten Years.*

1845	21	1851	3
1846	3	1852	4
1847	9	1853	4
1848	6	1854	3
1849	6	1855	6
1850	3		

N.B.—Since the year 1829 the Royal College of Physicians, Edinburgh, have granted their licence along with the fellowship; consequently all fellows are licentiates. There are no members.

II. *Period of Professional Study.*

By the rule of the college none are admitted to the fellowship until they have received the degree of M.D.; consequently the period of professional study is that required by the Universities.

III. *Age of Candidates.*

Answered by No. II.

IV. V. VI. *Examinations.*

The only candidates who are examined are the graduates of foreign Universities, and the following are the regulations respecting them. (*Laws*, chap. 2, sections 14 to 19 inclusive.)

"14. Every candidate for the fellowship who has not received his degree from a British University

University shall be subjected to examination. He shall, for this purpose, apply to the secretary; and provided the report of the examiners to the council is satisfactory, his petition, drawn up according to one or other of the forms given in the Appendix, Nos. IV. or V., shall be presented to the college at its next quarterly meeting, and the farther proceedings thereupon shall be as prescribed in laws 2 and 3 of this section.

" 15. An examination, however, may be dispensed with on a motion by a fellow, provided the motion be intimated in the billet summoning the meeting, and be carried unanimously.

" 16. The examiners shall consist of the president and six fellows nominated annually by the council at the meeting for the election of the other office-bearers of the college.

" 17. The examination may be concluded at one meeting, or with such adjournments as may seem advisable to the examiners, and shall consist—

" 1st. Of a dissertation, in English, on some subject in the practice of physic selected by the examiners, and written by the candidate in an apartment in the college hall, under the superintendence of the examiners.

" 2d. Of a *vivâ voce* examination in English, chiefly on the symptoms, nature, and treatment of diseases, and also on anatomy, chemistry, botany, and physiology.

" 3d. The examiners may also institute such examination as they consider advisable for satisfying themselves that the candidate has received a competent general education.

" 18. The examinations being concluded, the examiners shall decide by a simple majority of those present (the chairman having both a deliberative and a casting vote) whether the result of the examination has been such as to entitle him to be proposed for the fellowship; and if their decision be favourable, he may be proposed at the quarterly meeting following the one at which his petition was presented, and the ballot may be taken forthwith, if the intention of so doing was announced in the billet summoning the meeting. A majority of three-fourths of the fellows present shall be requisite to carry the motion.

" 19. The examiners shall keep a record of the examinations, with the state of the vote, a copy of which shall be laid before the council, and by the council before the college, at the meeting at which the ballot is to take place. In the case of unsuccessful candidates a record shall be entered by the examiners in their book, and communicated to the council; but no copy of this shall be laid before the college."

VII. *Time occupied in Examination.*

The time varies according to the manner in which the candidate answers the questions proposed to him on the several subjects before enumerated under heads IV. V. VI.

VIII. *Holders of Diplomas having elsewhere obtained Licences to Practise.*

The college have no means of answering this question, unless the required preliminary degree be held as a licence to practise.

IX. *Proportion of Rejected to Successful Candidates.*

The proportion rejected has been one-sixth of the whole who have been examined.

X. *Fees exacted for Examination.*

There are no fees exacted for the mere examination.

XI. *Privileges conferred by the Diploma.*

The privilege conferred is the power to practise in Edinburgh and its suburbs, the college possessing all the privileges of corporate bodies within its jurisdiction. But the fellowship is sought for by graduates intending to practise at a distance as a testimony of the college to the character of the individual.

XII. *Of the Examiners.*

The examiners are elected annually from among the fellows of the college, which has always hitherto contained within itself persons eminently qualified to examine on the various subjects prescribed. Failing this, however, provision is made for calling in the assistance of eminent men not fellows of the college.

Royal College of Surgeons, Edinburgh.

1. Number of Licentiates, Members, and Fellows (distinguishing each class) admitted each Year for the last Ten Years.

There are only two classes of parties belonging to the Royal College of Surgeons of Edinburgh, viz., fellows and licentiates.

(1.) The Fellows, properly speaking, constitute the college, being the absolute proprietors of the hall, museum, &c., and having the uncontrolled power of electing their president, treasurer, secretary, board of examiners of candidates for their diploma, and other office bearers. The following are the numbers of the fellows who have been admitted during the last 10 years, distinguishing the years of their admissions:

Year.	Number Admitted.
1845	3
1846	0
1847	1
1848	4
1849	1
1850	0
1851	3
1852	1
1853	5
1854	3
1855	6
The Total Number of Fellows of the College at present is	27

(2.) The licentiates of the college possess, in virtue of their diplomas, the same rights of practice, and the same *status* in the profession as belong to the members of the Royal College of Surgeons of England, but have no interest in the property of the college beyond the right of free admission to the museum, subject to such regulations as may from time to time be prescribed by the college.

The following are the numbers of those who have taken the diploma of the licentiate of the college during each of the last 10 years.

Year.	Number of Licentiates.
1845	101
1846	90
1847	76
1848	62
1849	86
1850	91
1851	88
1852	75
1853	110
1854	115
1855	145
Total Licentiates	1,039

2. Duration of the Period of Professional Study required for Licentiates, Members, and Fellows.

(1.) *Licentiates.*—The duration of the period of professional study enjoined of candidates for the licentiate's diploma of the college is particularly specified in Chapter III. of the accompanying Regulations of the College.

(2.) *Fellows.*—The college does not require any longer duration of the period of professional study from candidates for their fellowship than that required from their licentiates.

By

By the laws of the college, no person can be admitted as a candidate for the fellowship who is not in possession of the ordinary diploma of the college, or the diploma of some other college of surgeons, or public body legally entitled to grant surgical diplomas or licences. There are only four such bodies in the United Kingdom, viz., the three Colleges of Surgeons, and the Faculty of Physicians and Surgeons of Glasgow.

The ordinary mode of admission to the fellowship is by ballot; but the college retain the power of examining candidates who do not possess a diploma obtained in Great Britain or Ireland.

3. Age at which Candidates are eligible for Examination.

(1.) The age required of licentiates of the college is 21. (*See* Regulations, Chapter VI. § 4.)

(2.) That of fellows 22. (*See* Laws relating to Ordinary Fellowship, Chapter IV. § 6, of the Laws of the College.

The remaining portion of the return ordered, is understood to refer solely to licentiates, and is answered accordingly.

4. Subjects of Examination.

The subjects of examination are those specified in Chapter III. of the Regulations above referred to:

Preliminary.—Latin, and natural philosophy and mathematics.

Professional.—Anatomy, chemistry, materia medica, pharmacy, institutes of medicine or physiology, practice of medicine, surgery, military surgery, midwifery and diseases of women and children, medical jurisprudence, and botany.

5. Whether the Candidate is subjected to more than one Examination; if to more than one, at what interval.

The nature and mode of conducting examinations may be understood by reference to Chapters V. and VI. of the accompanying Regulations.

There are two examinations for the grade of licentiate of the Royal College; the one upon those matters which are of the nature of preliminary education, the other upon those which are strictly professional. These examinations may, in the option of the student, be taken together or separately; and in point of fact, they are taken separately by a considerable majority of those who receive the diploma of licentiates, and by a very large majority of those who are educated at the Edinburgh School of Medicine.

6. Mode of conducting the Examinations, whether *vivâ voce* only, or *vivâ voce* and by written Questions and Answers; and whether by Demonstrations, Dissections, and Clinical Examinations.

The two examinations being conducted differently, must be separately described.

(1.) Preliminary examinations in Latin, and in Natural Philosophy and Mathematics.

The preliminary examinations may be taken at any period of the course, in the option of the student. The nature of them will be understood by reference to the Regulations, Chapter V. The examinations in Latin were instituted in 1849, and have been continued ever since in the month of December of each year. The examinations in Natural Philosophy and Mathematics were begun in December 1853, and have therefore been only three years in operation, though they had for many years formed an occasional subject of examination at the final trial for the diploma. In the four years between December 1849 and December 1852, 407 students passed the Latin examinations at the annual period. Prior to that time, however, Latin was invariably a part of the examination for the diploma of the college.

In the last three years the number of students who have passed one or other, or both of the two preliminary examinations, (those in Latin, and those in Natural Philosophy and Mathematics), was 383.

In the last annual examination in December 1855, 129 students passed; of whom 101 passed in Latin, 91 in Natural Philosophy and Mathematics, and consequently 61 in both of these. Besides these, there were 19 rejected in Latin, and 20 in Natural Philosophy, &c. Of those examined, 81·18 passed in Latin, and 78·02 in Natural Philosophy, &c. There is a marked progressive improvement in the amount of the attainments of the students in these two departments since the subjects of them were separated from the final examination for the diploma; and this is more especially remarkable in their knowledge of Latin, in which the system of separate examination has been the longest in existence. The rejections do not distress the students, for they do not affect their professional character, are not recorded, and are no bar to their reappearance at the annual period of a subsequent year. The examinations are generally

taken early in the course of study, when the minds of the students are less engrossed with professional subjects.

By a reference to Chapter V., 2, it will be seen that certain parties are excepted from these Regulations. Besides these, there are a few who leave these preliminary matters to be disposed of along with their professional trial; these last, who are for the most part students educated at the other schools of medicine, are submitted to examinations of the same quality as those just described. The examinations occupy, every year, three several days in the month of December. On each day the method of conducting them is as follows: About 40 are seated at tables in the hall, in presence of the 12 assembled examiners, and are so placed as to prevent communication with each other; 10 or 15 more wait in an adjoining room till the completion of their tasks, by an equal number, leave sufficient space in the hall for their accommodation. To each is presented a copy of a paper printed off the preceding evening, and containing Latin sentences and questions in Natural Philosophy (*see* copies of these papers). The translations and the answers are performed in writing, and subscribed by the candidate, who retires into the library to await the decision of the Board. The examiners, leaving a sufficient number in the room for superintendence, form themselves into committees, who sit in an adjoining room, and examine and decide upon the merits of the translations, and of the answers in Natural Philosophy. Their award is marked on each paper, and a single examiner, in another room, notifies to each student the decision of the Board in each of the two departments, and receives in a record book the signatures of those who have been successful; distinguishing whether their success has been in both departments, or only in one. Marks of a characteristic kind are affixed in the record book to the names of those candidates who give proofs of superior excellence. A few cards used in December 1855, will show how the admission to these examinations is regulated, and there are also appended the examination papers used during the last three or four years.

(2.) Professional Examinations.

These are conducted by 12 examiners, distributed into classes of four each; three of them must be present during the whole of each examination; one examiner attends an hour before the other three, to propose written questions to the candidates. In the case of those who have not passed the preliminary examinations in Latin and Natural Philosophy, they are subjected by the examiner to exactly the same ordeal in those subjects as at the December examinations. Besides this some written questions in Anatomy and Chemistry are proposed to them by the examiner, to occupy the hour before the Examining Board is constituted. The examiners having arrived, the duties are thus arranged: One examiner undertakes to examine in Anatomy and Surgery; one in Chemistry and Pharmacy, nature and cure of diseases, uses and doses of medicine, and other kindred subjects; to a third, or sometimes to one of the first two, is assigned the duty of examining in Midwifery. While these examiners are conducting the examination, another is invariably engaged in making notes in a minute-book of the whole of the subject matter of examination. The examination, including the written part of it (which is revised by the whole Board), occupies, at an average, upwards of two hours in the case of each candidate. Two candidates are usually examined at each sitting of the examiners, which generally lasts upwards of two hours, over and above the hour occupied in writing, which hour is common to both the candidates. On the retirement of each candidate after his examination, the examiners decide whether he is to pass or not. If a doubt is expressed by any one, the nature and the number of the failures of the candidate are easily recalled by the aid of the minute which has been kept. Everything, therefore, is done which can be done to secure that each case shall be carefully and impartially considered. The decision is recorded in the Minute-book, together with the marks by the examiners, in the case of those candidates who evince superior proficiency; but no certificates are issued on the authority of the college except the diploma, and a separate certificate that the candidate has been found qualified in midwifery. All successful candidates, before quitting the room, inscribe their names and places of birth in the list of licentiates of the Royal College.

The portion of the curriculum relating to anatomy and surgery is conducted with reference to the human skeleton and surgical preparations; that relating to chemistry and pharmacy, with chemicals and drugs. No dissections or clinical examinations take place on the occasion.

7. Time usually occupied in the Examination of a Candidate.

This has been already answered under the preceding article.

8. Number of those who, obtaining such Licences or Diplomas, have elsewhere obtained Licences to Practise.

The college possesses no record of the names or numbers of those of their licentiates who obtain other licences, but with few exceptions they are those who settle in England and Ireland, and who are restrained, as regards the practice of pharmacy, by

by the operation of the London and Dublin Apothecaries' Acts in these countries respectively.

9. Proportion of Rejected to Successful Candidates.

The answer to this will be found in the following table of statistics of the examinations for the diploma of the Royal College, for each of the five years terminating at the annual meeting in October 1855.

TABLE.

Years.	CANDIDATES.			CANDIDATES REMITTED.				
	Examined.	Admitted.	Remitted.	Once.	Twice.	Thrice.	Four Times.	Five Times.
1850-1 -	101	87	14	10	1	2	- -	1
1851-2 -	109	90	19	14	4	1	—	—
1852-3 -	121	112	9	9	—	—	—	—
1853-4 -	123	114	9	7	2	—	—	—
1854-5 -	178	147	31	24	5	2	—	—
	632	550	82	64	12	5	- -	1

Proportion of remissions to examinations, 120 to 1,000, or 4 in 31.

10. Fees exacted for each Examination.

The fee paid on obtaining the diploma of the college is 10 *l.*

Out of the proceeds of the diploma fees each examinator receives a fee of 15 *s.* for each sitting, during which two candidates are examined.

11. Privileges conferred by the Diploma or Licence.

The Royal College of Surgeons of Edinburgh, being not merely a corporation of surgeons, but also, by charter, a corporation of apothecaries, the holders of their diploma have the exclusive right of general practice within the counties of the Three Lothians, Fife, Roxburgh, Berwick, Selkirk, and Peebles, and by use and wont a right of general practice all over Scotland, except within the counties of Lanark, Renfrew, Dumbarton, and Ayr, where the Faculty of Physicians and Surgeons of Glasgow are understood to possess an exclusive right of licence, similar to their own within the South-eastern counties. So far as regards the practice of surgery, and eligibility for poor-law appointments in England and Ireland, the licentiates of the college stand on precisely the same footing as those of the Royal Colleges of Surgeons of England and Ireland, being only restrained as regards the practice of pharmacy in these divisions of the kingdom by the Apothecaries' Acts of London and Dublin, which came into operation in the year 1815.

Neither of the above exclusive rights, viz., those of the College and of the Glasgow Faculty, is ever enforced against the holders of diplomas either of the other body, or of any college of surgeons of the United Kingdom.

12. Who are the Examiners in the several Subjects of Examination respectively; when, for what period, and by whom appointed.

The following are the names of the present Board of Examiners of the College, who conduct both the preliminary and professional examinations:—

John Gairdner,
William Brown,
James Simson,
Richard Hine,
William Dumbreck,
Archibald Inglis,
Robert Omond,
Patrick S. K. Newbigging,
Benjamin Bell,
James Dunsmure,
James Robertson,
Douglas Maclagan,

being all fellows of the College.

The Board of Examiners is appointed by the College along with their other office-bearers annually, at their statutory meeting on the third Wednesday of October of each year.

By authority of the
Royal College of Surgeons of Edinburgh,
Andrew Wood, M. D.
President.

Edinburgh, 29 April 1856.

DOCUMENTS referred to in Return by the ROYAL COLLEGE OF SURGEONS, *Edinburgh*.

LAWS of the ROYAL COLLEGE of SURGEONS of *Edinburgh*.

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(No. 1.)

LAWS of the Royal College of Surgeons of *Edinburgh.*

CHAPTER I.

Of Meetings of the College, and of the Order of Procedure thereat.

Of calling Meetings.

1. All meetings shall be held in the hall of the college, at the hour of one o'clock afternoon, except in cases hereafter mentioned.

2. Every meeting shall be called by an order of the president to the officer; who, in consequence thereof, shall despatch a billet, specifying the time and place of meeting, to each of the fellows, so that the same may be received not less than 24 hours before the meeting is to take place.

3. There shall be five *Ordinary Meetings* yearly; viz., one on the third Wednesday of October for the election of office-bearers, and one on the day following each of the terms of Candlemas, Whitsunday, Lammas, and Martinmas, viz., on the 3d February, 16th May, 2d August, and 12th November; but when any of these days falls on a Sunday, the meeting shall be held on the Monday following.

4. In urgent circumstances, the president, with the concurrence of his council, may order an *Extraordinary Meeting* to be called at any time and place; the purpose of which shall be specified in the billets of summons.

5. A *Special Meeting* may be called, on a requisition in writing being made to the president, and signed by seven fellows, in which the purpose of the meeting shall be expressly stated.

6. When the president is necessarily absent, the duty of summoning ordinary, extraordinary, and special meetings shall devolve upon the treasurer; and, when both president and treasurer are absent, upon the oldest president in Edinburgh, under the regulations contained in the preceding sections.

7. If the president, or the person officiating in his absence, shall neglect to cause an ordinary meeting to be summoned, he shall forfeit the sum of 1*l.* 1*s.*

8. If the president, or the person officiating in his absence, after having been regularly called upon by the requisition of seven fellows to summon a special meeting, shall refuse or omit to summon it within 48 hours after receiving the requisition, he shall be liable to a fine of 10*l.* 10*s.*

9. If a requisition for calling a special meeting shall be found, by a majority of the meeting, to be frivolous and vexatious, each fellow signing it shall forfeit 5*l.* 5*s.* to the college.

Of Fines for not attending Meetings, and of Exemptions.

10. Fellows whose names have been thirty years on the roll, shall be excused from fines on account of non-attendance at meetings of the College. Other fellows shall not be excused, except on account of sickness, military duty, absence from Scotland, or special leave granted by the College.

11. Every fellow who has not been 30 years on the roll, and not otherwise excused, and who is absent from a meeting regularly summoned, shall be liable to a fine of 1*s.*; and those who do not attend till the roll of names has been called over, shall forfeit 6*d.* each.

12. When there is not a quorum in five minutes after the names are called, every absentee not excused shall forfeit 2*s.* 6*d.*

13. No fellow shall leave a meeting without permission from the president, under the penalty of 5*s.*

14. The fines of the president for being late, or entirely absent from meetings, shall be double those of ordinary fellows.

15. If the secretary shall be absent five minutes after the hour for which a meeting is summoned, without having sent a substitute properly qualified, he shall be liable to a fine of 5*s.*

16. If the Treasurer shall be absent from the Lammas meeting, without assigning a reason that is satisfactory to the College, he shall be liable to a fine of 2*l.*

Of Procedure at Meetings.

17. At all meetings, the president, when present, shall preside; and in his absence, the chair shall be occupied by the oldest president at the meeting, or by the oldest fellow (if none who have been presidents are present), who shall resign the chair to the president, if he arrive during the meeting.

18. The seniority of presidents shall be determined by their priority as president, not by the date of their admission, or natural age.

19. Ten ordinary residing fellows shall, in every meeting, be necessary as a quorum for the despatch of business.

20. When a meeting consists of a quorum only, or is reduced to that number by fellows leaving it, if the president, or person officiating as such, shall thereafter permit any more to retire, whereby the meeting is reduced to less than a quorum, he shall forfeit the sum of 1 *l.* 1 *s.*

21. If the president, or person presiding in his absence, shall leave the chair before the business of the meeting is finished, and without the consent of a majority of the meeting, he shall be liable to a fine of 10 *l.* 10 *s.*

22. Each meeting shall be constituted by the secretary, or the person officiating for him, reading the accustomed prayer,* five minutes after the hour appointed in the billets of summons.

23. The roll of fellows shall then be read over by the secretary, and the names of the fellows present marked.

24. After calling the roll, the secretary shall read the minutes of the last meeting, and, when their accuracy has been admitted, the same shall be signed by the president. Documents referred to in the minutes, and alterations of the minutes authorised by the College, shall be authenticated by the president's attaching his initials to them. The minutes, with the relative documents, shall afterwards be engrossed in the records of the College on the responsibility of the secretary.

25. The business of the day shall then be considered, beginning with that which the president may have to propose, and then proceeding to such as may be moved by any of the fellows.

26. If any special business is fixed to be discussed on a particular day, and is accordingly specified in the billets, the business shall proceed absolutely, although a paper ordered to be circulated shall, from any negligence, not have been left at the house of every fellow; and to obviate any inconvenience on that account, a copy shall be left with the secretary for the information of fellows.

27. Competition for priority, either for proposing business, or speaking on subjects already proposed and under discussion, shall be determined in favour of the person who first rises to speak; and when this is a matter of doubt, it shall be determined in favour of the senior fellow.

28. In a meeting held on the requisition of fellows, the president shall desire those by whom it was signed to state the business for which the meeting was called; which shall be considered before the proposal of any other fellow is received.

29. Every fellow, in speaking, shall respectfully address himself to the president; and no one shall interrupt another in speaking, when a question is before the meeting.

30. No fellow shall speak oftener than twice on the same question, without the consent of a majority of the meeting.

31. Every motion shall be stated in writing, if required by the secretary or any fellow; and after being proposed by the mover with such explanations as he may deem proper, shall be seconded by at least one fellow before it shall be further discussed or considered. This shall apply to all motions; but such as have to lie over till a subsequent meeting, shall not require to be seconded previously to that meeting.

32. No motion which is not intimated in the billets shall be considered, unless the purport of it has been distinctly stated immediately after the reading of the minutes.

Of Voting.

33. All questions shall be determined by the votes of the majority, if not otherwise provided for by the laws.

34. The

* This prayer is in the following terms:—"O eternal God, our loving and merciful Father in Christ Jesus—Seeing we are convened to treat of those things which concern our calling, we beseech thee, O Lord, to be merciful to us, and give us grace to proceed therein without malice, grudge, or partiality; so that the things we do may tend to the glory of God, the weal of our vocation, and the comfort of every member of it; through Jesus Christ, our only Lord and Saviour. Amen."

34. The president shall, in every question, have one vote as an ordinary fellow; and thereafter shall have a casting vote when the votes are equal.

35. When votes are taken, the president shall call over the roll, and those on each side of the question shall be marked and certified by the secretary.

36. The secretary, on being required by any fellow, shall mark down the names of those voting on opposite sides of any particular question, and shall insert them in the minutes.

37. No fellow shall vote on any question, or hold any office, if he owes more than 2 *l.* to the College, whether the same shall have been incurred by fines or otherwise.

38. When any new law, or alteration or repeal of an old law, is proposed, the motion for that purpose shall lie on the table till the next meeting. The billets of summons shall intimate the nature of the motion; and it shall not be admitted if not approved of by two-thirds of the fellows who vote.

39. Every motion, whose effect is to alter or repeal any of the existing laws, shall contain a specification of all the laws so affected by it, and of the alterations contemplated in each; and if, on discussing the motion, it is found that such specification is incomplete, the discussion shall be adjourned, unless the College, by a show of hands, decide otherwise.

40. When any sum exceeding 10 *l.* is proposed to be voted from the funds, the motion with regard to it shall lie on the table till the next meeting. The billets for such next meeting shall intimate the substance of the motion; and it shall not be adopted unless approved of by two-thirds of the fellows who vote.

41. Whenever a meeting is to be summoned, the officer shall call upon the secretary to furnish him with a note of the motion or motions (if there be any) which require by the laws to be mentioned in the billets of summons; which note the secretary shall furnish accordingly.

42. If the secretary, on being called on by the officer, shall neglect to furnish him with a note of such motions as are required to be mentioned in the billets for summoning a meeting, he shall be liable to a fine of 10 *s.*

Of Committees.

43. When any business is referred to a committee, the convener, and all the members thereof, shall be nominated by vote.

44. The president is *ex officio* a member of every committee.

45. At the appointment of every committee, a time shall be fixed for the business being finished which the meeting intrust to it.

46. Accounts and all other expenses incurred by committees shall be reported as regularly as possible to the quarterly meetings of auditors.

CHAPTER II.

Election of Office-Bearers, and their Respective Duties.

1. All fellows who practise in Edinburgh or its suburbs, shall serve in those offices to which they are elected, under the penalty of 5 *l.* to the College, if not otherwise provided for by the laws.

Office-Bearers who are Annually Elected.

President.

2. The president shall be elected annually, on the third Wednesday of October, by a majority of the votes of the fellows present at a meeting called for the purpose.

3. If the president shall be absent from Edinburgh for more than 24 hours without intimating his absence to the treasurer; or, if, after such intimation, the treasurer absent himself without giving intimation to the oldest president, they shall respectively forfeit 1 *l.* 1 *s.*

President's Council.

4. On the president being elected, he shall, with the approbation of the College, appoint a committee of six ordinary fellows, who, together with the treasurer for the time being, shall form a council to assist him with their advice when he shall desire it. Three of this committee shall be a quorum.

5. The members of the president's council who do not attend meetings of the council when regularly summoned, shall pay a fine of 2 *s.* 6 *d.* for each absence.

Treasurer.

6. The treasurer shall be elected on the same day with the president, annually.

7. The treasurer shall call for and receive all money and debts due to the College; and when any difficulty occurs to him in the execution of this part of his office, he shall inform the College thereof; whose instructions he shall strictly observe, under the penalty of paying to the funds a fifth part of all sums to which the said instructions shall relate.

8. All accounts due by the College shall be paid quarterly by the treasurer, as regularly as possible.

9. The treasurer shall take no security for debts due to the College, without the authority of the president and his council, otherwise he shall be liable for the same; nor shall he expend more than 3 *l.* without that authority, except on the repairs of houses; and when in this case the expense exceeds 5 *l.*, and happens to be necessary before any of the ordinary meetings of the College, he shall consult the president and council on the propriety and extent of the same, and shall be regulated by their determination.

10. The treasurer shall balance his accounts every year, on the 30th July, or, if that day shall happen to be Sunday, on the 29th July, and shall deliver, or cause to be delivered to the Lammas meeting, a report signed by at least three of the auditors of accounts, containing his charge and discharge of the money belonging to the funds, with a true state of these accounts, under the penalty of 5 *l.*, and of being ineligible to the office of treasurer in all time coming; unless it shall appear that the auditors had neglected or refused to meet him for that purpose, after he had required them so to do, and had given them at least 48 hours' warning of the proposed meeting, by a billet left at each of their houses. And he shall not engage the College in any lawsuit, either for the recovery of debts, or on any other account, without the approbation of a meeting.

11. The treasurer shall pay 5 *l.* annually, from the funds of the College, to the curators of the University library, for increasing the same, in terms of an agreement which took place in 1763, by which every fellow of this College has right to borrow books from the said library.

12. The treasurer shall keep a regular book of accounts, containing lists of all debts due by and to the College, and a copy of his annual fitted account; which book shall be produced yearly at the Lammas meeting, under the penalty of one guinea; and the fitted account shall remain in the hands of the secretary for the inspection of the fellows.

13. The treasurer may retain 30 *l.* in his hands; but whenever he shall have more than 30 *l.* in his possession, the surplus shall be lodged in some respectable banking house, approved of by the college; and when the funds so lodged shall amount to 200 *l.* they shall be lent out on heritable or personal bonds, or other good security, of which the president and his council shall approve.

14. The interest of all bankers' notes and bonds for the aforesaid sums, shall be regularly stated to the credit of the College.

15. The treasurer shall be entitled to a yearly salary of 30 *l.* for his trouble in managing the affairs of the College.

Auditors of Accounts.

16. On the same day, annually, with the election of the president, five fellows, of whom three shall be a quorum, shall be chosen as a committee, to examine and audit the treasurer's annual account.

17. On the day of the annual balance of the treasurer's accounts (*see* section 10 of this chapter), this committee shall prepare and sign a report, to be presented to the College at the Lammas meeting.

18. The auditors of accounts shall meet quarterly as a finance committee along with the president and treasurer, and besides comparing the accounts with the vouchers, ascertaining their accuracy, and sanctioning their payment, shall report to the College the amount of the quarterly expenditure, with any observations that may occur to them in reference to its future reduction or better regulation.

19. The auditors of accounts who do not attend the meeting for auditing the treasurer's accounts, shall be liable to a fine of 1 *l.* 1*s.* each.

Librarian, and Library Committee.

20. At the annual meeting for the election of the president, the College shall choose one of their number to act as librarian for the ensuing year; and four ordinary fellows shall at the same time be chosen, who, along with the librarian, shall be the Library Committee, and who shall from time to time inspect the state of the books belonging to the College, and report thereon when necessary.

21. When a book is presented to the College, or proposed to be purchased, if any objection

objection be made to its reception or purchase, the subject shall be referred to the Library Committee, to report to the following meeting of the College.

Curators and Conservator of Museum.

22. At the same meeting, two fellows shall be elected, by signed lists, as curators of the museum for the ensuing year, in the room of the two who are to go out by rotation (*see* Chapter VIII., sections 1, 2, 3); and at the same time a person duly qualified shall be elected as conservator of the museum (*see* Chapter VIII., section 12).

Examinators.

23. At the same meeting, a list prepared by the secretary shall be exhibited by him, of all those fellows who have previously declined acting as examinators, in consequence of having served 10 or more years; and to this list shall be added the names of all those fellows entitled by law to decline service for the ensuing year or for the future, who shall have intimated to the secretary in writing, at that meeting, their wish to avail themselves of their privilege, and the names of those fellows who are ineligible as examinators by law 30th of this chapter.

24. At the same meeting, each fellow present shall give a signed list to the secretary, containing the names of 12 fellows for performing the duties of examinators for the ensuing year, all of whom must have been fellows of the College for the space of one year.

25. At the same meeting, a committee of two fellows shall be named to examine the lists along with the secretary, and the 12 fellows who are found to have the greatest number of votes shall be reported to the meeting, when they shall be declared examinators for the ensuing year.

26. When two or more fellows have an equality of votes, the senior fellow shall be returned.

27. The 12 fellows thus elected shall be divided into three classes,* each consisting of four, three of whom shall be a quorum.

28. If one or more examinators die while in office, or if circumstances occur which render it inconvenient for any on the list of examinators to continue to hold the office (of which the College is to judge), in either of these events, the election of another examinator or examinators shall take place in the manner above directed, at a meeting called for the purpose.

29. If any fellow have served for two years successively, or if (having been elected to supply a vacancy caused by the death or retirement of an examinator) he have served during a part of one year and the whole of the following year, he shall have it in his power to decline the office for the two years immediately succeeding, provided that he declare his intention at the annual meeting for the election of office-bearers. Fellows who have acted for 10 years as examinators shall be entitled to decline the office in all time coming.

30. Fellows who give lectures on subjects constituting part of the curriculum of study prescribed by the College shall not be eligible as examinators.

31. All meetings of examinators shall be held in the hall, at two o'clock p.m., or at such other hour as the examinators shall fix, with permission of the College; and 2 *l.* 2 *s.* shall be allowed from the funds for every meeting of a quorum of examinators, being 10 *s.* 6 *d.* to each examinator when they are all present, and 14 *s.* when three only attend.

32. The meeting shall be constituted as soon as a quorum is present.

33. If there be not a quorum at 10 minutes past the hour appointed, the absentees shall be fined 2 *s.* 6 *d.* each, those who do not attend till 20 minutes after the hour shall be fined 5 *s.*, and if a quorum shall not be present at half an hour after the time of meeting, the absentees shall pay 10 *s.* 6 *d.* each, in addition to the said fine of 5 *s.*

34. Any examinator may send a substitute, not of the same class with himself.

35. Examinators shall not be obliged to continue their sederunts longer than two hours at one diet, and when there are more candidates than can be examined at one sitting, the different classes of examinators shall sit in succession every day, till all the candidates are examined.

36. The secretary shall insert in the minute-book the names of the examinators present at every sederunt.

Assessors,

* On the 19th October 1836, the College resolved that the examinators, when elected, should be arranged on the principle that the number of years each has served should determine his seniority; and that in cases of equality in this respect, the seniority of the examinators should be determined by the priority of their entry as fellows. This decision has merely the force of a resolution, not of a law.

Assessors, and the Board for Conducting Examinations for the Fellowship.

37. The Board for examining candidates for the fellowship shall consist of four examinators and three assessors, the President of the College being one of the latter.

38. Three examinators and two assessors shall constitute a quorum of the Board.

39. The classes of examinators shall be called to this duty in succession, without reference to the rotation in which they are summoned to the ordinary examinations.

40. At the annual meeting for the election of office-bearers, four fellows shall be chosen by signed lists, and by a majority of votes, from among the number of those who have been presidents or examinators, to be assessors for the ensuing year; and the president shall cause two of those assessors in rotation to be called to each meeting of the Board along with himself.

41. A fee of 3 *l.* 13 *s.* 6 *d.* shall be allowed from the funds for every meeting of a quorum of this Board, and shall be divisible equally among those who attend.

Trustees of the Widows' Fund.

42. At Lammas yearly, when the oldest trustee on the list goes out by rotation, it is provided by the Act of Parliament for establishing this fund, that a new trustee shall be elected in his stead by the contributors, who may re-elect the same person, and he thereupon becomes the lowest on the list.

43. At the Lammas meeting yearly, the trustees shall present a list of those contributors alive at the Whitsunday preceding.

44. The other duties of the trustees, and of their collector and clerk, and all other regulations respecting the Widows' Fund, are fixed by an Act of Parliament passed in the 27th year of Geo. 3, by which that fund was established; by another Act passed in the 53d year of Geo. 3, by which certain alterations and improvements were introduced respecting the fund; and by the enabling Act (13th Victoria, chapter 23), and charter founded thereon, in which the mode of winding up this and the Auxiliary Widows' Fund is prescribed. Reference is here made to these documents, which are printed, and are in the hands of all the contributors.

Trustees of Auxiliary Widows' Fund.

45. At the Lammas meeting yearly, when the oldest trustee of the Auxiliary Widows' Fund goes out by rotation, a new trustee shall be elected to fill the vacancy; but the college may re-elect the same person, as in the case of the trustees of the Widows' Fund.

Committee on Registration.

46. On the day of the annual elections, the College shall appoint a committee of three fellows to superintend the registration of students.

OFFICE-BEARERS WHO HOLD THEIR OFFICES DURING PLEASURE.

1. *Secretary.*

47. When the office of secretary is vacant, a person of character, properly qualified, shall be chosen at a meeting expressly called for the purpose; the object thereof being notified to all the fellows in the billets of summons.

48. The secretary shall hold his office during the pleasure of the College.

49. The secretary shall be present at every meeting, or shall send a deputy, whose qualifications are satisfactory to the College, to officiate in his stead; and shall regularly enter minutes of all the proceedings in the minute-book, and transcribe them, after they have been approved of by the next meeting, into the records of the College.

50. The secretary shall be present at all meetings of the president's council when required, and shall enter in a book, to be kept for the purpose, a minute of their decisions in all matters brought before them which are not referred by them to the College. This minute-book shall be laid on the table of the College at the regular quarterly meetings, and at any other meeting, upon intimation being given to the secretary by any of the fellows that it will be required.

51. The secretary shall transact all the law business of the College (charging the ordinary business fees), including the writing of bonds or other securities.

52. The secretary shall write all indentures between fellows and their apprentices, and likewise all discharges of those indentures, charging for the same according to the regulations made on that subject.

53. The

53. The secretary shall receive a salary of 60 *l.* sterling annually, and shall be entitled to the following fees in the discharge of his office:—

Fees payable to the Secretary.

	£.	s.	d.
From every entrant on his admission to the College, for writing his act of admission	2	2	–
From every entrant with the privileges of the Widows' Fund, on his admission, for writing his obligation to pay his contributions to the fund, besides stamp	2	10	–
From every apprentice, for drawing his indenture and extending the same, besides stamp	1	11	–
From every apprentice, for the discharge of his indentures, to be paid at the time of drawing ditto	–	5	–
From every apprentice, for inserting his name in the books of the College	–	5	–
From an apprentice, for transferring his indenture	–	5	–
For entering the list of fellows who vote for or against any motion in the sederunt book, to be paid by the person requiring the same	–	1	–
For making extracts from the minutes, which the secretary shall furnish to every fellow who shall desire it, he shall be paid according to the length; for the first sheet	–	2	6
Every other	–	1	6

54. No extract from the minutes of the College shall be delivered to any fellow without an express order of the College to that purpose, till such minutes have been approved of and put on the records of the College at a meeting subsequent to that at which the business referred to was transacted; nor shall any fellow have access to such minutes in the hands of the secretary till they have been so approved of and recorded.

55. The secretary shall at no time allow copies of the minutes to be taken from the books, nor the books themselves to be out of his possession.

56. The secretary shall every quarter, at the expense of the College, publish the names of those who have received diplomas from the College during the preceding three months, in the form prescribed in Chapter VII.

57. The secretary shall at every quarterly meeting give in a list of all apprentices for whom he has executed indentures since the preceding meeting.

58. The secretary shall pay over to the treasurer, once a quarter, all sums received by him on behalf of the College.

59. A state of all the funds belonging to the College, viz., the Ordinary Fund, Widows' Fund, and Auxiliary Widows' Fund, shall be made out by the secretary annually at Lammas, and printed.

2. *Officer.*

60. The officer shall be elected by a majority, at a meeting called expressly for the purpose, the business of the meeting being specified in the billets summoning the same.

61. His office shall be held during pleasure.

62. He shall keep the hall clean and in good order, and shall attend at the door at every meeting; he shall write and despatch all billets summoning the fellows; he shall at all times be ready to perform the business of the College, and shall not allow any other occupation to interfere therewith.

63. He shall receive a salary of 30 *l.* annually, and shall be entitled to the following fees in the discharge of his duty:—

	£.	s.	d.
From every fellow at his admission	–	10	6
For each person who receives diploma or certificate*	–	5	–
From each apprentice at signing his indenture	–	2	–

CHAPTER III.

Of Fines.

1. All fines shall be regularly entered in a book to be kept for the purpose by the secretary, which book shall be laid upon the table at every meeting, to give an opportunity to the fellows to appeal when they have a lawful excuse.

2. Whoever appeals against a fine shall pay double the amount if he is found liable by a majority.

3. The

* This fee is paid from the funds of the College, as the price paid for a diploma includes all charges.

3. The fines shall be collected by the secretary.

4. A state of the whole fines shall be made up annually by the secretary, and presented at the Martinmas meeting, and a note of the amount due by every resident fellow shall then be sent to him for payment, with intimation that if not paid before the Candlemas meeting following, he shall incur a penalty of one-fourth part of the said fines; and if not paid on or before the Whitsunday thereafter, he shall be subjected to a prosecution in the treasurer's name for the amount of the whole.

5. The whole fines collected during the year shall be entered by the secretary in a separate account, and paid over by him to the treasurer, previously to the annual balance of his accounts. (*See* Chapter II., Section 10.)

CHAPTER IV.

Of the Ordinary Fellowship.

Of the Admission of Fellows.

1. Every candidate for the fellowship, with the exceptions mentioned in Section 12 below, shall lodge with the president a petition to the College, and shall be recommended by two fellows as proposer and seconder.

2. The billets calling the meeting at which the said petition is to be presented shall intimate the name of the candidate, and the names of his proposer and seconder.

3. The petition shall be considered at a subsequent meeting, to be held not earlier than a month after the first; and in the meantime the names of the candidate, his proposer, and his seconder, shall be hung up in the library; and the billets calling the second meeting shall contain an intimation in the same form as those of the first.

4. No person shall be received as a candidate for the fellowship who is not in possession of the ordinary diploma as a licentiate of the Royal College of Surgeons of Edinburgh, or of the diploma of some other college of surgeons, or public body legally entitled to grant surgical diplomas or licences.

5. The College retain power, if they think fit, to examine candidates for the fellowship who do not possess a diploma obtained in Great Britain or Ireland.

6. No person shall be admitted as a fellow who is under 22 years of age.

7. No petition shall be received by the president until he receive evidence that the candidate has lodged his entry-money with the treasurer, or, in his absence, with the president or secretary.

8. No person who has served an apprenticeship of five years with a fellow shall be admitted as a candidate for the fellowship on the footing of an apprentice until he has lodged with the president his discharged indenture, or a certificate from the secretary that such indenture has been discharged.

9. At the meeting for considering the petition of the candidate the votes shall be given by ballot. Three-fourths of the votes shall be required to entitle the candidate to be admitted, and the number of those voting shall not be less than 20.

10. The candidate shall be informed of the resolution of the College; but before taking his seat as a fellow, he shall make a declaration to the following effect, and shall subscribe the same in the Sederunt-book: "I hereby promise faithfully to maintain and defend all the rights, liberties, and privileges of the Royal College of Surgeons of Edinburgh, and to promote the interest thereof to the utmost of my power. I also promise faithfully to obey all the laws of the said Royal College, made and to be made."

11. Candidates who do not find it convenient to repair to Edinburgh may be permitted, by a vote of the College, to be enrolled as fellows in absence, if they transmit letters of obligation to conform to No. 10, before taking their seats.

12. Sons and sons-in-law of those fellows the date of whose admission to the College was prior to the passing of the Charter of 1851, and apprentices for the freedom whose indentures commenced prior thereto, shall be entitled to claim the right of becoming candidates for the fellowship, in conformity with Chapter IV., sections 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, and 24 of the last edition of the Laws of the College (1840), as subsequently amended according to a copy in hands of the secretary; they being subject to all the requirements of the Acts of Parliament relating to the Widows' Scheme.

13. Every fellow, on his admission, shall receive a diploma engraved on vellum, with the seal of the College appended, and shall pay the secretary's and officer's dues, and the expense of the document itself. The diploma shall be in the following terms:—

"Collegium

"Collegium Regium Chirurgorum Edinense A—— B—— virum disciplinâ multiplici excultum, studiis præscriptis rite peractis, in Societatem suam cooptare decrevit; omniumque honorum et beneficiorum quibuscunque fruitur, participem esse voluit."

Of the Entry-Money of Fellows.

14. All candidates for the fellowship, with the exception of those mentioned in Law 12, shall pay 50*l.* to the funds of the College, together with 3*l.* 2*s.*, being the amount of the secretary's and officer's fees, and of the expense of the diploma.

15. Sons of those fellows who have entered on or before the 15th of May 1820, and who claim to become contributors to the Widows' Fund, shall pay 8*l.* 6*s.* 8*d.* as entry-money the College, besides 3*l.* 13*s.* 6*d.* for examination fees, and 3*l.* 2*s.* as above.

16. Sons-in-law of fellows who have entered on or before the 15th of May 1820, and who claim to become contributors to the Widows' Fund, shall pay 16*l.* 13*s.* 4*d.* as entry-money, and 3*l.* 13*s.* 6*d.* for examination fees, and 3*l.* 2*s.* as above.

17. Sons and sons-in-law of fellows who have entered subsequently to the 15th May 1820, and before the passing of the Charter of 1851, and who claim to become contributors to the Widows' Fund, shall pay 100*l.*, and 3*l.* 2*s.* as above.

18. Apprentices for the freedom, whose indentures commenced before the 20th of November 1811, and who claim to become contributors to the Widows' Fund, shall pay 43*l.* 6*s.* 8*d.*, and 3*l.* 2*s.* as above. Those whose indentures commenced on or after that date, and before the passing of the Charter of 1851, shall pay 100*l.*, and 3*l.* 2*s.* as above.

N. B.—With the exception of the candidates mentioned in No. 14, all the above-mentioned classes shall pay 30*l.* to the Auxiliary Widows' Fund, besides the entry-money payable to the College. (*See* Appendix to Chapter IX., section 3, of last edition of the Laws, 1840.)

19. The half of all entry-moneys that are received for the admission of fellows who are contributors to the Widows' Fund belongs to that fund, agreeably to the Acts of Parliament establishing it, and the same shall accordingly be paid over by the treasurer, or other person receiving it, to the collector of the fund, immediately after the admission of every such fellow.

Special Laws applicable to Fellows.

20. No fellow of the College shall keep an open shop for the sale of drugs or other merchandise.

21. No fellow of the College shall allow his name to be connected with advertisements or publications of an indelicate or immoral nature.

22. No fellow of the College shall practise or profess to practise, by the use of, or according to, any secret remedy or method of treatment; nor shall allow his name to be connected with advertisements for the sale of any secret remedy, or for practice by the use of any secret remedy, or method of treatment; nor shall connect himself in partnership or otherwise, nor continue in connexion with any person practising by means of, or advertising the sale of any secret remedy.

23. No fellow of the College shall be guilty of any deception or other immorality in the practice of his profession, nor shall in any other way conduct himself inconsistently with the honour and decorum which become a fellow of the College.

CHAPTER V.

Of the Honorary Fellowship.

1. The election of honorary fellows shall be confined to those who have distinguished themselves in some of the branches of the medical profession.

2. Their election shall be at one of the ordinary meetings of the College, and at no other, and they must have been proposed at the ordinary meeting immediately preceding.

CHAPTER VI.

Of Apprentices.

1. By the charter of 1851 (p. 21.), the College ceased to be a civic incorporation, and the apprenticeships for the freedom of the city were thenceforth abolished.

2. All indentures of apprenticeships to fellows of the College must be written by the secretary; and not only shall every indenture written by any other be null and void, but every fellow who shall employ another person for that purpose shall forfeit 10*l.* sterling *toties quoties.*

CHAPTER VII.

Of Examinations.

1. Examinations of apprentices and others, for diplomas and certificates, shall take place in the hall on the first and third Tuesdays of every month, at two o'clock afternoon; and the classes of examinators shall be regularly summoned to attend, by billets for that purpose left at their houses, not less than 24 hours before the time of meeting.

2. When the number of candidates offering themselves on one of the regular days of examination is such that they cannot be all examined at one sederunt, examinations shall take place every day at two o'clock till the list is finished; and when the number is very large, the examinators shall hold additional meetings at such times as may be convenient for them, so that the whole list may be finished before the next regular day of examination.

3. It shall be competent for the president to summon meetings of examinators on the fourth or fifth Tuesday of April, and on the fourth or fifth Tuesday of July, for granting ordinary examinations to such as may apply for them, and also to continue to summon the classes of examinators successively on the lawful days succeeding to these days, till the whole of the candidates on the list have been examined.

4. No examination shall take place on the day of the annual election of office-bearers; and it is recommended to the president that in fixing the days of the meetings of the College he avoid, as far as possible, interfering with the days of examinations.

5. All candidates, before they are admitted to trial, must produce sufficient evidence of their having conformed to the course of study prescribed by the College. Everything which relates to this course of study, the qualifications of teachers, recognition of schools, registration, examinations, fees, and other matters necessary to be explained to candidates for the diploma of the College, is promulgated from time to time for their information in a separate set of regulations.

6. The proceedings at every examination shall be entered in the books of the College, excepting the names of unsuccessful candidates, of which a list shall be kept by the secretary. This list shall be carefully preserved, and it shall be the duty of the examinators to take care that no one except the president and themselves shall be permitted to see it.

7. The diploma of the College shall be as follows:

"*Collegium Regium Chirurgorum Edinense.*

"Hisce literis testatur virum ingeniosum , studiis præscriptis rite peractis, examini sese subjecisse, atque ita ad interrogata de iis respondisse, ut muneri tam chirurgico quam pharmaceutico suscipiendo omnino par esse videretur. Edinburgi, die anno ."

8. Every person presenting a letter from the Physician-general of Her Majesty's Navy, authorising him to be examined touching his qualification to act as assistant surgeon in the navy, may be taken on trial for that purpose, whether he has previously received a diploma or not.

9. The following certificate shall be granted to successful candidates:—"Surgeon's Hall, Edinburgh, the day of . In presence of the Royal College of Surgeons of the city of Edinburgh, appeared Mr. , and being examined upon his skill in anatomy, surgery, and pharmacy, was found sufficiently qualified to act as an assistant surgeon in the Royal Navy. In testimony whereof, &c.

"To the Hon. the Inspector-general
of Hospitals and Fleets."

10. Any person presenting a letter from the Physician-general of Her Majesty's Navy, authorising him to be *re-examined* respecting his qualification to act as *surgeon* on board of Her Majesty's ships, shall be admitted to a second examination for that purpose, and on being found qualified, shall receive a certificate in the following terms:

"To the Hon. the Inspector-general of Hospitals and Fleets.

"Sir,

"We have examined Mr. and find him qualified to serve as surgeon on board any of Her Majesty's ships. We are," &c.*

11. No

* In reference to the above forms of certificates, sections 9 and 10, it may be proper to refer to the following extract of a letter, dated 7th March 1826, received by the President of the Royal College, from the Commissioners of the Victualling Board:—"Their Lordships," (the Right Honourable the Lords Commissioners of Admiralty), "have been pleased to direct that no person be admitted to be a candidate for the situation of assistant surgeon in the Royal Navy, who shall not produce a certificate from one of the Royal Colleges of Surgeons of London, Edinburgh, and Dublin, of his fitness for that office; nor for that of surgeon unless he shall produce a diploma or a certificate from one of the said Royal colleges, founded on an examination to be passed subsequently to his appointment of assistant surgeon, as to the candidate's fitness for the situation of surgeon in the Navy; and that, in every case, the candidate producing such certificate or diploma, shall also undergo a farther examination before the Medical Commissioners of this Board, touching his qualifications in all the necessary branches and points of medicine and surgery for each of the steps in the naval medical service."

11. No person shall be examined for either of the above certificates without presenting an official letter from the Physician-general in conformity with the preceding regulations (Sections 8 and 10).

12. The examination for a certificate either for a surgeon or assistant surgeon in the navy, shall be equally complete and rigid as the examination for a diploma.

13. The secretary shall report, at every quarterly meeting of the College, a list of certificates granted during the preceding quarter.

14. Every diploma shall be signed by the president and by the 12 examinators; and every certificate shall be signed by the president and by the class of examinators by whom the examination was conducted.

15. No duplicate of a diploma stated to have been lost or destroyed shall be granted without sufficient evidence of the fact, of which the College, or, in cases of emergency, the president's council is to judge. The duplicate shall have a minute subjoined to it, reciting the circumstances under which it was granted, and subscribed by the president in office at the time of granting it, and by the secretary.

16. A list of all those who obtain diplomas from the College shall be published quarterly in one of the Edinburgh newspapers, at the expense of the College.*

17. Those obtaining diplomas from the College shall be called *Licentiates* of the Royal College of Surgeons of Edinburgh.

CHAPTER VIII.

Of the Museum.

Of the Curators.

1. The College shall elect 10 fellows, who together with the Professors of Surgery, of Clinical Surgery, and of Military Surgery, in the University (if fellows of the College), shall be curators of the museum, and shall conduct its management.

2. Five of these curators shall be a quorum.

3. Two of the 10 elected curators shall go out of office every year by rotation, from the top of the list, and shall not be eligible for two years thereafter. (*See* Chapter II., section 22.)

4. The curators shall hold four regular meetings in the year, on the last Tuesdays of January, April, July, and October, at one o'clock P. M. These meetings shall be regularly summoned by the officer; and it shall be the duty of the conservator to give the necessary directions for such meetings being called.

5. At each of the above meetings the curators shall examine the state of the museum, and shall prepare a report thereon, to be given in to the College at the next ensuing quarterly meeting.

6. Two curators shall visit the museum, at least once a fortnight, for the purpose of examining its state generally, the preparations which the conservator may have put up, particularly, also the list of specimens which he may have received since last visit; and they shall see that the histories, so far as they can be obtained, have been properly entered in the catalogue. The visiting curators shall make a minute of the results of their examination, in a book to be kept for the purpose, and attest it with their signatures. They shall be fined 1*s.* for non-attendance on each day for which they are summoned.

7. The decisions of the visiting curators shall be binding till the next general meeting of the curators; and the decision of the general meeting of curators shall also be binding till altered by a vote of the College.

8. The president, or the conservator of the museum, may call a meeting of the curators at any time when business connected with the museum shall appear to him to render it necessary.

9. Minutes of the business of all the meetings of the curators shall be regularly kept, and entered in a book for the purpose.

10. The curators shall be fined the sum of 1*s.* each for non-attendance at all regularly summoned meetings; but if a quorum is not present, the absent curators shall be fined 2*s.* 6*d.* each.

11. If

* The form of advertisement is as follows:—"Since ———— last, the following gentlemen, candidates for the diploma of the Royal College of Surgeons of Edinburgh, having produced satisfactory evidence that they had completed the course of study prescribed by the College, have been examined and found fully qualified to practise the arts of anatomy, surgery, and pharmacy, and have accordingly received diplomas as *Licentiates of the College.*"

11. If the curators shall neglect to lodge their stated quarterly report at the proper meeting, they shall each pay a fine of 2*s.* 6*d.*; a similar penalty being incurred at each subsequent meeting of the College, until it is lodged.

Of the Conservator, and his Duties.

12. The College shall annually elect a properly qualified person to be conservator of their museum.

13. The conservator shall not go out of town without leave of the president. He shall not possess a museum of his own, nor shall he directly or indirectly assist in the formation of any other museum; nor lecture on any subject whatever, without the special consent of the College.

14. The conservator shall receive from the College a salary of 100*l.*, and shall defray all charges for assistants, clerks, or servants under him.

15. The conservator shall take the management of the museum, and of everything connected with it, under the direction of the curators. He shall be held responsible for keeping its whole contents in a proper state of repair and preservation; and shall attend at all meetings of curators, when required to do so.

16. The conservator shall prepare and preserve, describe and register, all articles deposited in the museum. He shall make out accurate histories of all the diseases to which morbid specimens may refer, so far as he is able to procure them. He shall arrange and label the preparations, so as to facilitate reference to them as much as possible, and shall attach the name of the donor to each preparation.

17. The conservator may, with the approbation of any one of the curators, decline adding to the collection a preparation of any sort of which he thinks there is already a sufficiency of specimens; in which case he must communicate with the donor, and return it if required.

18. The conservator, or some person appointed by him, and approved of by the curators, shall be present in the museum during all the hours when it is open for public inspection; and the former shall attend in person during two of these hours, viz., from one to three o'clock, for the purpose of affording any explanation that may be required of him by fellows of the College, or by visitors.

19. If the conservator shall neglect to order a quarterly meeting of the curators of the museum to be called in proper time, he shall pay a fine of 5*s.*

Regulations as to those who shall have the Use of the Preparations.

20. The professors of surgery, of clinical surgery, and of military surgery, in the University (if fellows of the College, and lecturing within its premises), shall be allowed the use of the preparations, casts, and drawings, contained in the museum, with the exception of such as the curators shall conceive might be injured by removal. This privilege shall not be granted to any professor who is employed in making collections of his own, or who withholds from the museum of the College such specimens of disease as are placed at his disposal.

21. The preparations, casts, and drawings contained in the museum shall not be removed from the premises of the College, handed round a class-room, nor handled by those admitted to examine the museum. But the donors of preparations may, upon application to the conservator, remove such preparations as they themselves have presented, for the purpose of being shown to their pupils, or to any public society, provided the curators are of opinion that such preparations will not be injured by removal; it being understood that they are to be returned uninjured, and that they shall not be retained longer than three days, unless by special permission of the curators.

22. When any preparations are wanted by those who are entitled to the use of them application must be made to the conservator, who shall take a receipt for them, and deliver them accordingly. The receiver shall be bound to return them in equally good condition.

Of Admission to the Museum.

23. The museum shall be open for inspection every Monday, Tuesday, and Friday, from 12 to 4 o'clock, and every Saturday from 10 to 4.

24. Fellows of the College shall have admission to the museum at all times that it is open for inspection; and shall be entitled to introduce their friends, either personally or by letter, to the conservator.

25. Professors of the University, fellows of the Royal Society, fellows of the College of Physicians, medical officers of the army and navy, licentiates of the College, and apprentices of fellows, shall have access to the museum at all times that it is open for inspection by means of tickets, which the conservator is authorised to issue. Students of medicine whose names have been inserted in the Album of the Royal College of Surgeons shall have admis-

sion

sion to the museum by annual tickets, which will be delivered to them at the time of registration.

26. Any gentleman may have access to the museum upon making application to the conservator for a ticket of admission, which shall specify the days and hours when the bearer will be admitted.

27. The conservator shall have power occasionally to allow an extra hour when the museum is not otherwise occupied for the admission of fellows giving lectures and their pupils (who shall produce their annual tickets of admission), when these lecturers wish to illustrate any particular subject by preparations in the museum. Such extra hours shall be allotted according to priority of application. Lecturers claiming this privilege shall be held responsible for any damage which the museum may sustain from themselves or their pupils at such times; and shall be subject to those rules which the curators may prescribe as to the number of pupils who shall be permitted to attend, and as to anything else which may appear to the curators to involve the interests and safety of the collection.

28. Fellows desirous of visiting the museum at other hours than those on which it is open to the public shall be obliged to conform to such regulations as the curators have enacted or may enact.

Of taking Drawings from Casts or Preparations.

29. By making application to the curators every facility will be afforded to gentlemen wishing to make drawings from preparations, casts, &c. contained in the museum. But it is to be distinctly understood that no drawing or cast taken from the museum shall, on any account, be published without leave obtained from the curators; and in granting such permission the curators shall be regulated by the wishes of the donors of the preparations, in so far as these can be ascertained.

CHAPTER IX.

Of the Widows' Fund, and Auxiliary Widows' Fund.

[For information regarding the institution and objects of these funds, the rates of contribution thereto, and the interests which the present contributors possess, and a certain class of entrants are entitled to acquire therein (*see* Chapter IV., section 12), reference is made to the printed Report on the state of the funds as at Lammas 1851, by Mr. Spens, actuary, and to Chapter 9 of last edition of the Laws (1840), which is still in force as regards such entrants.]

APPENDIX.

I.—STATUTES enacted by the Honourable Patrons of the University of Edinburgh, as to the Conditions of Extra-Academical Instruction.*

REPORT by the College Committee, regarding the Regulations for the Recognition of the Extra-Academical Teachers of Medicine in *Edinburgh* (approved of by the Magistrates and Council on 26th January 1847).

Edinburgh, 14th January 1847.

On 27th October last, the magistrates and council approved of a report by the college committee, regarding the statutes of the university relative to the degree of M. D. At the same time, they rescinded the statutes contained in the act of council 13th November 1833; approved of and sanctioned the statutes transmitted by the medical faculty, as amended by the college committee, and directed the same to be communicated to the Senatus Academicus, in order that they might be acted on by them.

The following is Section III. of the statutes thus approved of and sanctioned by the Patrons:—

"Attendance on the lectures of teachers of medicine in the hospital schools of London, or school of the College of Surgeons in Dublin, or of teachers of medicine in Edinburgh, recognised

* These statutes are not at present in actual operation, having been suspended by an application to the Court of Session, calling in question the right of the Honourable Patrons to enact them. The decision of the Court in the beginning of the present year (1852), in favour of the Patrons, is now under appeal to the House of Peers, at the instance of the Senatus of the University.

recognised as such by the Royal Colleges of Physicians and Surgeons of Edinburgh (in accordance with regulations to be adopted by these colleges jointly, and approved of by the Patrons of the University), shall, to the extent of one-third of the whole departments required by Section II., clause 1, to be studied by candidates, be held equivalent to attendance under professors in this or in some other university, as already defined. And such attendance shall be available to candidates to the extent of one of the four years of study required by Section I., provided it has embraced, in one year, at least two six months' courses of lectures, or one of these and two three months' courses."

The statutes, as sanctioned, were accordingly communicated to the Colleges of Physicians and Surgeons, with a request that they would prepare and transmit the proposed regulations as soon as might suit their convenience.

On 24th November, the two colleges transmitted the proposed regulations, three in number; and on these, which were remitted to the college committee on 1st December, the committee beg now to report as follows:

1. That an addition should be made, towards the close of the second regulation, of the words "with a view to recognition," which the committee think necessary, in order the more clearly to bring out the meaning of the Patrons in enacting the third section of the statutes, quoted above.

2. That two regulations should be made in addition to those framed by the two colleges; that numbered 4, in order to secure, as a general rule, that each branch shall be taught by a separate teacher; and that numbered 5, in order to give effect to the council's resolution of 27th October in the matter of fees.

3. That, with these amendments, the Patrons should approve of the regulations, as hereto subjoined, and transmit them to the Senatus Academicus, to the two royal colleges, and to the extra-academical teachers, for the information and guidance of all concerned.

Wm. Duncan,
Convener of the College Committee.

Regulations as to Lecturers whose Courses of Lectures are to qualify for the Degree of M. D. in the University of *Edinburgh.*

1. That no fellow of the Royal College of Physicians, or of the Royal College of Surgeons of Edinburgh, shall be recognised by the college to which he belongs, as a public lecturer or teacher of any of the medical sciences, until his qualifications shall have been tried in the particular branch which he professess, by examination before a Board appointed by the Royal College of which he is a member.

2. That in the case of lecturers on chemistry and on natural history, who, according to the practice of this school of medicine, do not require to be fellows of the colleges, or to possess a medical status, the examination, with a view to recognition, shall be conducted by a joint Board, consisting of an equal number of persons appointed by each of the two colleges.

3. That the lecturers who have delivered courses of lectures in Edinburgh, which lectures have constituted a part of the course of study required for the surgical qualifications conferred in this city, shall be exempted from the necessity of qualifying in the manner above described in regard to future courses on the same subjects. But this regulation shall not be applicable to lecturers on departments which may in future be added to the course of study for the degree of M. D.

4. That no lecturer shall be recognised who, at the same time, teaches more than one of the prescribed subjects of study, excepting in those cases where professors in the university are at libery to teach two branches.

5. That for every ticket of a lecturer recognised in terms of these regulations, to be ultimately presented as evidence of attendance, with a view to graduation, there shall be paid a fee of the same amount with that exigible by the medical professors in the university.

II.—STATUTES of the Royal College of Surgeons of *Edinburgh*, in regard to Lecturers and Teachers whose Instructions shall in future be received as a part of the Course of Study for their Diploma,—enacted 14th October 1846.

1. No lectures given by fellows of the Royal College of Physicians, or of the Royal College of Surgeons of Edinburgh, after the 1st December 1846, shall be received as qualifying for examination for the diploma of the college, unless the lecturer shall have been specially recognised and admitted by the college to which he belongs, as a teacher of the particular science which he professes.

2. The recognition of fellows of the Royal College of Surgeons of Edinburgh shall be given by special examination on that particular science.

3. The

3. The examination shall be conducted by the same Board which conducts the examinations for the fellowship, with the addition of one member, who may, if it is thought expedient, be a person who is not a fellow of the college, and who shall be nominated by the president with a special reference to his scientific knowledge of the department which the candidate aspires to teach. The special member of the Board so selected shall have no deliberative vote in its proceedings, and shall be chiefly responsible for conducting, under the immediate superintendence of the Board, all matters of detail connected with the examination of the candidate for the office of lecturer or teacher. The quorum of the Board shall be five, and shall always include the special member.

4. The examinations may be conducted *vivâ voce*, or by written questions, or in such other methods as may be approved of by the Board.

5. In the event of the college concurring, by a vote of three-fourths of those present at a regularly constituted meeting (of which vote due notice has been given in the billets calling the meeting), in considering the qualifications of an applicant, in relation to the science he wishes to teach, to be sufficiently established by his reputation, by his writings, by his position as a selected clinical teacher in the Royal Infirmary, or otherwise, such candidate shall be admitted as a lecturer without having been specially examined.*

6. Lecturers in Edinburgh who have delivered courses of lectures or of instructions prior to August 1846, conformably with the then existing laws of the college, shall be exempted, in regard to courses of lectures or of instructions on the same subjects, from the necessity of qualifying in the manner above described.

ADDITIONAL STATUTES,—enacted 20th May 1847.

7. A Board for examining persons desirous to teach departments of science for which, by the laws of this college, the fellowship of neither of the Royal Colleges is required, shall be chosen for each occasion, and shall consist of six members, three of whom shall be nominated by each college. Of the three selected by the Royal College of Surgeons, one may be a person who is not a fellow. The successive Boards shall be constituted in the premises of the two colleges alternately; and if any Board shall adjourn, its sittings shall be resumed in the premises in which it originally sat, till its business is completed. Each Board shall choose its chairman from among the nominees of the college in the premises of which its sittings are held; and the chairman shall have a casting vote in case of the votes being equal.

8. The sum of five guineas shall be paid by fellows, and the sum of 10 guineas by non-fellows, to the treasurer of the college, prior to the appointment of a Board to examine. In the case of non-fellows, the sum may be paid to the treasurer of either college. In all cases, the money shall be returned to unsuccessful candidates on the production of a certified extract of the decision of the Board.

9. The secretary or clerk of the college in which an examination for the office of teacher takes place, shall summon the Board at a time to be fixed by the president. He shall minute the decision of the Board, supply a copy of the minute to the candidate, and receive for these services a fee of 10 *s.*

10. The money paid by the candidate, after providing for the fee of the secretary, shall be divided equally among those members of the Board who give attendance, except that in the case of examinations of fellows, the fee of the special member shall be double that of the others.

11. Every candidate who is not a fellow shall apply by petition to the president of one or other of the two Royal Colleges, and shall produce a testimonial as to his general character, signed by at least three fellows of either college.

12. The Board shall have a discretionary right to inquire into the extent of the museums, apparatus, and other means of illustrating lectures, possessed by candidates, or available to them, which may appear to the Board to be necessary to the success of the candidates as teachers in their own particular departments of instruction.

III.—STATUTES of the ROYAL COLLEGE of SURGEONS of *Edinburgh*, as to the conditions of obtaining the Recommendation of the College to Medical Appointments in the Army and Navy,—enacted 20th May 1847.

The Lords Commissioners of the Admiralty having recently intimated to the Royal College of Surgeons of Edinburgh that they will be ready to receive, as a candidate for the office of assistant-surgeon in the royal navy, a gentleman recommended by the college, once in every three years, from among the number of their licentiates, and the director-general of

* This law confers no status in relation to the curriculum of study for the degree of M. D.

of the army medical department having also intimated his willingness to receive as a candidate for a medical appointment in the army, a gentleman recommended by the college, once in every two years, from among the number of their licentiates, the following regulations were adopted by the college, for determining the mode of recommending licentiates as candidates for these appointments:

1. The president and his council shall give notice, at such times and through such channels of public intelligence as they shall approve, of the intention of the college to recommend candidates for the said appointments.

2. Applications for the recommendation of the college shall be given in to the president on or before the last day of July of the years in which the college is to recommend.*

3. The recommendations shall be given after a comparative trial of merit, by such methods as the board appointed by the college shall deem expedient.

4. The examination shall relate to any or all of the subjects contained in the curriculum of study prescribed by the college.

5. The director-general of the army medical department having made it a necessary condition that the candidates for his appointments shall produce certificates of being "well versed, either in comparative and minute anatomy, or in zoology and botany," it will be the duty of the board to pay particular attention to these departments in the examination of candidates for army appointments.

6. The board for conducting the examinations shall be nominated by the college for each occasion, on a day to be fixed by the president, not sooner than the Whitsunday meeting, nor later than the third Tuesday in July. Intimation of the business shall be given in the billets for calling the meeting.

7. The board shall consist of seven examiners, of whom the professor of military surgery shall be one, and the others may be either fellows of the Royal College of Surgeons, or men of scientific acquirements not connected with the college. They will be expected to act gratuitously, and the president shall be guided by their report in recommending the candidate. If both the army and the navy appointments fall to be made in one season, the same committee shall report on both.

APPENDIX to the CHRONOLOGICAL LIST of FELLOWS to 25 September 1852.

William Walker - - - - -	27 June 1851.
Robert Foulis, M.D. - - - -	27 June 1851.
Andrew Fyfe, M.D. - - - -	14 October 1851.

APPENDIX to the CHRONOLOGICAL LIST of PRESIDENTS.

James Scarth Combe - - - - - 1851.

(No. 2.)

REGULATIONS to be observed by CANDIDATES for the DIPLOMA of the ROYAL COLLEGE of SURGEONS of *Edinburgh*.

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Notice.

Surgeons' Hall, Edinburgh,
1 November 1855.

THE Royal College of Surgeons of Edinburgh, in revising, from time to time, their regulations respecting the course of study to be followed by candidates for their diploma, have been uniformly anxious to extend and improve the education of those who receive that testimonial

* Candidates applying must produce, along with their diplomas, a letter from the proper officer of the Medical Board of the Army or of the Navy, as the case may be, or of both Boards if they are desirous to have a chance of being recommended to either the one or the other appointment, stating that they have conformed to the whole course of study required by those Boards respectively.

testimonial of qualification, so as more effectually to secure that they shall be competent to perform their professional duties with credit to themselves and advantage to the public.

In former editions of these Regulations, the college have insisted strongly on the great importance of a liberal education, literary and scientific, as a preparation for the successful prosecution of the study of medicine and surgery; and they now invite attention to the fifth chapter of these regulations, which they hope will ensure attention being paid by the student to this very important object at that period of his course of study which precedes his medical curriculum, or at all events in the earlier years of that curriculum, when his time is less absorbed by the acquisition of knowledge strictly professional.

The more important changes in the present edition will be found in Chapters III., IV. and V.

In Chapter III. it will be seen that the curriculum has been increased by the addition of botany, and by a small addition to the term of hospital attendance, with the alternative of a certain amount of dispensary attendance. These changes, though conformable to the course of study actually pursued by most students, will only be enforced in the case of those now entering on their studies.

In Chapter IV. will be found some changes in the method of certifying registration and attendance on classes. These, it is believed, will be found to be simpler and more convenient both to students and to the officials of the college, than those hitherto in use.

The acquisition of a certain amount of knowledge of mathematics has been for some time required by the college; and it will be found by inspection of Chapter V. that this subject will in future be embraced in the Natural Philosophy examinations.

It is important to the interests of those medical men whose qualifications are derived from this college, to promulgate as extensively as possible the fact, that by a law-opinion of the Attorney-general and of Mr. Martin, given in 1843, with reference to the construction of the English Poor Law Amendment Act, it is established that the licentiates of the Royal College of Surgeons of Edinburgh are exactly on the same footing in England, as to privilege *in surgery*, with the members of the Royal College of Surgeons of England.

The terms of the opinion, together with the circumstances which led to its being sought by the then Home Secretary, are explained in the *Edinburgh Medical and Surgical Journal* for 1843, Vol. LX., p. 452.

REGULATIONS.

CHAPTER I.

Schools of Medicine.

1. Every candidate for a surgical diploma must have followed his course of study [Ch. III. 2.] in a *university*, or in an *established school of medicine*, as defined below, or in a *provincial school* specially recognised by the College of Surgeons of that division of the United Kingdom in which it is situate.

2. Under the title *established school of medicine* are comprehended the medical schools of those cities of Great Britain and Ireland in which diplomas in surgery are granted, and such foreign schools as are similarly circumstanced in the countries in which they exist.

3. Every candidate for a surgical diploma must have passed at least one winter session in an *established school of medicine* [Ch. I. 2.] or at the school of Aberdeen.

CHAPTER II.

Qualifications of Teachers.

1. The following classes of persons shall be entitled to give lectures which may be attended as part of the course of study:—1st. *In the Universities of Great Britain and Ireland, in University College and King's College, London, in Queen's College, Birmingham, and in the Queen's Colleges of Cork, Belfast, and Galway in Ireland,*—the Professors of those institutions. 2d. *In Edinburgh*, Resident Fellows of the Royal College of Physicians of Edinburgh, and Fellows of the Royal College of Surgeons of Edinburgh, whose lectures have been sanctioned by the college to which each lecturer belongs.* 3d. *In London*, Fellows and Licentiates of the Royal College of Physicians of London, and Fellows and Members of the Royal College of Surgeons of England, whose status as teachers has been admitted by that college. 4th. *In Dublin*, Fellows of King's and Queen's College of Physicians in Ireland, and Fellows of the Royal College of Surgeons in Ireland. 5th. *In Glasgow*, Fellows of the Faculty of Physicians and Surgeons of that city.†

2. The

* The college enacted, in 1846, statutes regarding the manner of sanctioning lecturers and teachers in the Edinburgh school, which is by special examination on their several departments.

† The only lecturers excepted from this law are those on chemistry, who may be persons non-medical, if recognised by the college after examination by a joint Board with the College of Physicians, in conformity with statutes enacted in may 1847, and printed separately.

2. The college will not recognise any course of lectures, delivered subsequently to 1st May 1839, by a professor or teacher who lectures upon more than one of the branches of instruction included in their curriculum, nor any course delivered by a professor or teacher who, in addition to the said course, lectures upon a branch of instruction, medical or general, not included in the curriculum, unless such professor or teacher shall have obtained special leave from the college to do so.

3. Notwithstanding the above regulation, the teaching of two branches, as in the following instances, may be undertaken by one individual without disqualification being incurred, viz., Anatomy and practical anatomy; Chemistry and practical chemistry; Practice of medicine and clinical medicine; Practice of surgery and clinical surgery; and, *for the present*, clinical medicine or clinical surgery may be taught simultaneously with any one of the other courses of education prescribed in the curriculum, by a physician or surgeon qualified according to the regulations of the college, and attached to a public hospital of the size which those regulations prescribe.*

CHAPTER III.

Course of Study.

1. *Preliminary Instruction.*—Every candidate for the diploma of the Royal College must have received regular instruction in the *elements of mathematics*. He must also have acquired a knowledge of *natural philosophy*; and for this purpose the college recommend attendance on a regular course of lectures where practicable. The candidate must also have been well instructed in the *Latin language.*—*See* Chap. V.

2. *Professional Instruction.*—The candidate must have been engaged in attending the following *separate* and *distinct* courses of lectures during a period of not less than 27 months, in which must have been included three winter sessions of six months' duration each:—

		Duration—at least
Anatomy	2 Courses †	Six months each.
Practical Anatomy		Twelve months.
Chemistry	1 Course	Six months.
Practical Chemistry	1 ditto	Three months.
(The number of pupils in each class being limited to 25);		
Or Analytical Chemistry	1 ditto	Three months.
Materia Medica and Pharmacy	1 ditto	Six months.
Institutions of Medicine, *or* Physiology ‡	1 ditto	Six months.
Practice of Medicine	1 ditto	Six months.
Clinical Medicine §	1 ditto 2 Courses †	Six months; *or*, Three months each, during the period of his attendance at the hospital where they are delivered.
Principles and Practice of Surgery	2 Courses †	Six months each.
Or Principles and Practice of Surgery,	1 Course	† Six months each.
and Military Surgery, ‖	1 ditto	† Six months each.
Clinical Surgery §	1 ditto 2 Courses †	Six months; *or*, Three months each, during the period of his attendance at the hospital where they are delivered.
Midwifery and the Diseases of Women and Children	1 Course	Three months.
Medical Jurisprudence	1 ditto	Three months.
Botany	1 ditto	Three months.

Besides

* In making the above concession respecting clinical medicine and clinical surgery, the college wish it to be understood that this is done rather in consideration of the present state and arrangements of existing schools, than from their entertaining any doubt that the teaching of either of those branches, in addition to his hospital duties, would afford ample occupation for a teacher.

† The two courses must not be simultaneous.

‡ In those schools of England and Ireland in which two separate courses of lectures are delivered at separate hours, one on anatomy, the other on anatomy and physiology, the former of these courses will be received as one of the two courses of anatomy required by this college; and the other as the course of institutions of medicine, or physiology.

§ Clinical medicine and clinical surgery must not be attended at the same time.

‖ The course of military surgery must be delivered by a professor of that branch in a university, or by a lecturer, who, in addition to the other requisite qualifications, has served in the medical department of the army or navy; and the course must be of at least six months' duration, and comprehend not fewer than 60 lectures.

Besides the above-mentioned courses of lectures, the candidate must have attended a course of instruction in Practical Pharmacy, at the laboratory of a surgeon or apothecary; or of a chemist and druggist recognised by the College on special application; or of a public hospital or dispensary; and he must produce evidence that he has been engaged in compounding and dispensing medicines for the space of six months. Those who produce certificates of having been, for the space of at least two years, private pupils or apprentices to regularly licensed medical practitioners, keeping laboratories for dispensing medicines, shall be held qualified in this branch of instruction.

3. The six months' courses delivered in *Edinburgh* must consist of not fewer than 110 lectures, with the exception of clinical medicine, clinical surgery, and military surgery. The three months' courses must consist of not fewer than 60 lectures. Two *London* courses of three months each, on any of the above subjects, will be taken as equivalent to one six months' course.

4. The candidate must also have attended, for 24 months, a public general hospital containing at an average 80 patients; or he must have attended such an hospital for 21 months, and have also attended for six months the practice of a public dispensary specially recognised by the College.

5. The following order of study is recommended as a guide to the student, though not absolutely enjoined:—

First Year - -	Anatomy; Practical Anatomy; Chemistry; Natural Philosophy, *if not previously attended*; Practical *or* Analytical Chemistry, and Botany, *either in this or the second year.*
Second Year - -	Anatomy; Institutions of Medicine, *or* Physiology; Surgery; Materia Medica and Pharmacy, *either in this or the third year;* Hospital.
Third Year - -	Practice of Physic: Clinical Surgery; Practical Anatomy; Practical Pharmacy; Hospital.
Fourth Year - -	Surgery *or* Military Surgery; Midwifery and the Diseases of Women and Children; Clinical Medicine; Medical Jurisprudence; Hospital.

6. The College strongly recommend to students to avail themselves of any opportunities which they may possess of attending lectures on natural history or natural science, comparative anatomy, and pathological anatomy, in addition to the courses of lectures which are absolutely required by the above regulations.

CHAPTER IV.

Registration and Certificates.

1. A book shall be kept in the hall of the College, for the registration, at stated times, of all medical students who may apply. In this book all Edinburgh students who desire to possess the diploma of the College must enter their names, and the classes which they attend, whether under professors in the University, or under other qualified teachers.

2. The registration shall be conducted by the conservator of the museum, or by a substitute, for whom he shall be responsible. He shall enter in separate columns—1st, The name of each individual; 2d, The medical classes, hospitals, and dispensaries attended by each during the current season; 3d, The names of the teachers. He shall register such only as apply personally to him, shall examine all the tickets produced by each individual, and shall not register any classes for which tickets are not produced.

3. Each student shall pay annually, on his first registration for the year, the sum of 5*s.*, and shall be provided with a ticket of admission to the museum.

4. The book shall be closed for the registration of the winter classes on the 30th of November in each year; and of the summer or intermediate classes, at the end of the second week from their commencement.

5. When a student is prevented by sickness, or any other unavoidable cause, from complying with the above regulations, he shall, as soon as the case admits, present a statement of the circumstances, with proper evidence, to the conservator, to be laid by him before the registration committee, who shall report their opinion to the College; and, if the application be sustained, the individual so applying shall be enrolled in the usual manner.

6. Blank forms of certificates of the whole of the prescribed course of study will be supplied to registered students by the conservator, who will attest at the beginning of each session the registration of the classes of that session, by affixing a stamp to the certificates of those classes. At the end of each session these certificates must be attested by the teachers. See Chap. VIII.

7. Such certificates will be required from all candidates for surgical diplomas, in regard to that part of their medical education which they may have received at Edinburgh.

Similar certificates will be received from any other schools in which registration books are kept, in regard to such portions of the course of study as the certificates may embrace. Candidates educated at schools where no registration-books are kept must produce certificates from the respective professors or lecturers, both of their having entered to their several classes at an early period of the course, and also of their having attended those classes with due regularity. And in the case of practical anatomy, the certificate must express that the candidate has, during the course of his attendance, been actually engaged in the dissection of the human body, under the personal superintendence of the professor or teacher.

CHAPTER V.

Annual Examinations in Latin and in Natural Philosophy.

1. The College having instituted an examination in Latin, and also an examination in natural philosophy, to take place on the second Saturday in December annually, without expense to the students, those who desire to avail themselves of either or both of these examinations must give in their names, addresses, and places of birth, to the officer, two full days prior to that day. Students intending to take the diploma of the College are recommended to take these examinations at as early a period in the course of study as possible.

2. Candidates for the diploma of the college who have taken a degree in arts from a university of Great Britain or of Ireland, will be exempted from the examinations in Latin and in Natural Philosophy.

3. All candidates who have not given proof of the competency of their knowledge of Latin by the methods prescribed in the last two regulations, will be required to translate into English a portion of a Latin author at the commencement of their examination for the diploma of licentiate; and if they cannot do so satisfactorily, the examination will not be proceeded with.

4. All candidates who have not given proof of the competency of their knowledge of natural philosophy by the methods prescribed above (sections 1 and 2), will be liable to be examined on this department at the time of their examination for the diploma of licentiate.

5. "Natural philosophy," in the sense of the preceding regulations, will be held to include such an amount of knowledge of mathematics as is necessary to a right understanding of the questions proposed.

CHAPTER VI.

Final Examinations for the Diploma of the College.

1. The days of examination are the first and third Tuesdays of every month. When the number of candidates is such that they cannot all be examined at one sitting, the examiners will sit every lawful day until all have been examined.

2. No candidate will be admitted to examination before the termination of his last year's course of study.

3. Applications for examination must be made to the examiner of the students' course of study at least two days previously to the day of examination.

4. Every candidate, on applying to the examiner, will be required,—1st, To produce satisfactory evidence of his having attained the age of 21 years;—2d, To produce the certificates of his teachers prepared as prescribed in the preceding chapter; and, 3d, To present a tabular statement (for which a printed form will be furnished by the conservator) exhibiting the full amount of his professional education, as well as a separate list of all the classes, hospitals, and dispensaries attended during each session of his studies. If he have been an apprentice, he shall also insert the name of his master, the date of his indenture, and the length of time for which he was bound. This statement, accurately filled up, must be attested by his signature, and will be preserved by the College as a record.

5. If the candidate have been an apprentice to a fellow of the College, he must also produce his discharged indenture.

6. On the production of these documents, the examiner will give the candidate a letter authorising the examinators to take him on trial.

7. The fees payable to the funds of the College must be lodged, before the examination, in the hands of the treasurer, who will certify this upon the examiner's letter, after inspecting and being satisfied with the certificates. The fees will be returned to unsuccessful candidates, whose names will be concealed.

8. Unsuccessful candidates will be remitted to their studies for a period to be determined by the judgment of the examinators, but not in any case less than three months.

9. The examiner, if he judge it proper, may order a meeting for examination on any day, at

at the request of a candidate; but in that case the candidate must pay 3*l.* sterling in addition to the customary fees; and this money will not be returned to him in the event of his being remitted.

10. In order to test more effectually the practical knowledge of candidates specimens of anatomy and of the materia medica will be employed during the examinations; and every candidate will be required to write out one or more formulæ of prescription.

CHAPTER VII.

Fees.

1. *For a Diploma,* ordinary candidates pay the sum of 10*l.*

2. Apprentices of those who were fellows of the College prior to the charter of 1851 pay 5*l.* for a diploma.

3. *For the Certificate of Qualification to act as Assistant-Surgeon in the Navy,* candidates not having paid for any previous qualification pay 4*l.* 19*s.* 6*d.*

[Assistant-surgeons in the navy, having previously obtained certificates from the College, and having complied with the course of study prescribed by the College, will receive a diploma on making up the sum to 10*l.*]

4. *For the Certificate of Qualification to act as full Surgeon in the Navy,* assistant-surgeons who have already obtained certificates from the College pay 3*l.* 18*s.* 6*d.*; and those who have previously obtained the diploma of the College pay 2*l.* 17*s.* 6*d.*

[Surgeons in the navy having received certificates of qualification as such, and having complied with the course of study prescribed by the College, will obtain a diploma on making up the sum to 12*l.* 17*s.* 6*d.*]

The sums stated above include all fees of every kind, and the officer is prohibited from receiving any.

CHAPTER VIII.

Special Regulations to be Observed by Lecturers in Edinburgh.

The Royal College of Surgeons of Edinburgh have enacted,—

I. That every private lecturer at this school of medicine shall ascertain, at least 25 times in a six months' course, and 12 times in a three months' course, the actual attendance given by his pupils.

II. That he shall do this by calling the name of each pupil at least once a week, and entering in a regular roll-book the presence or absence of each individual; the students, of course, being kept in ignorance of the particular days on which this is to be done.

III. That the said roll-book shall be kept according to a form prescribed by the College; shall also be carefully preserved; and shall be at all times accessible to the examiner of the course of study, and to the treasurer of the College, on whom it shall be incumbent to examine the roll-book of each class at least once during every session, before the termination of the third weeks in April and July respectively.

IV. That on granting certificates of attendance on their classes the private lecturers shall use the annexed form, filling up the blanks with words at length, and on no account employing figures:—

"Edinburgh,

"I hereby certify that Mr. attended my course of lectures commencing on and terminating on ; that the roll of the class was called times during the session; and that Mr. was present on of these occasions."

(signed) _____

V. That when a student's certificate of attendance bears that he has been more than five times absent in a six months' course, or more than thrice in a three months' course, when the roll of his class was called, the examiner shall intimate this at the foot of that student's letter to the examinators, specifying the branch or branches on which the attendance was defective, in order that he may be particularly examined upon them. But if, on the other hand, a student's certificate of attendance bears that he has been absent more than eight times in a six months' course, or more than four times in a three months' course, he shall not be admitted to examination until he has attended another course of lectures on every such department of study.

VI. That when a student's absence has been occasioned by sickness, or any other unavoidable cause, such cause shall be stated in the certificate of attendance granted by the lecturer; and the president and council of the College shall decide whether the student shall or shall not be required to attend another course of such lectures before presenting himself for examination.

VII. That the above regulations shall be imperative on every private lecturer at this school of medicine whose lectures are recognised by the College; and it is hereby notified

notified that in the event of its being ascertained that any lecturer evades the faithful enforcement thereof, the College will not hesitate to withdraw their recognition of his course of lectures.

By authority of the Royal College,

(signed) *Andrew Wood*, M.D., President.

Surgeons' Hall, Edinburgh,
1st November 1855.

(No. 3.)

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

Schedule of the Course of Study.

I_____Candidate for the Diploma of Licentiate of the Royal College of Surgeons of Edinburgh, do hereby certify, that the account of my course of study contained in this sheet, is prepared by me, and is faithful and accurate.

NAME OF CANDIDATE.	AGE.	PLACE OF BIRTH.	(If an Apprentice) Master's Name.	Endurance of Indentures.

(signed)_____

Dated at _____ the_____day of_____18 .

Note.—Notwithstanding the extensive currency given by the College to its Regulations as to the course of study to be observed by those who desire to possess its diploma, errors and disappointments still occasionally occur, chiefly as to the following points:

1. One winter's course of study must have been followed in an *established* school of medicine, or in the Aberdeen school. The *established* schools, in the sense of the Regulations, are those in which diplomas in surgery are given; and, in the United Kingdom, are four in number. [*See* Regulations, Chap. I.]

2. Teachers must possess certain prescribed qualifications [Chap. II. 1.], and are not permitted, except in certain specified cases, to lecture on two departments. [Chap. II. 2.]

3. In those schools of England and Ireland in which two separate courses of lectures are delivered at separate hours, one on anatomy, the other on anatomy and physiology, the former of these courses will be received as one of the two courses of anatomy required by this College; and the other as the course of institutions of medicine, or physiology.

4. The term of study must extend to 27 months of attendance on the prescribed classes, and must include not less than three winter sessions. [Chap. III.]

For all particulars, reference is made to the printed Regulations, which will be found in the hands of the secretary of the College.

Students are cautioned that such of them as propose going into the Army, will be required by the Medical Board of that department, to conform to its curriculum, which includes some additional classes.

WINTER AND SUMMER SESSIONS OF MEDICAL STUDY, NAMES OF PROFESSORS, LECTURERS, &c.

Observe in Filling up this Schedule:—1st. To insert at the top of the columns the date of commencement of each Session, and the place where the Lectures were attended; 2d. To insert in the column applicable to each Session of Attendance, the Names of the Teachers attended, in a line with the names of the Courses which are printed in the Margin.

Classes which are Prescribed.	Session Commencing 18 , at .	Session Commencing 18 , at .	Session Commencing 18 , at .	Session Commencing 18 , at .	Session Commencing 18 , at .	Session Commencing 18 , at .	Session Commencing 18 , at .	Session Commencing 18 , at .
Anatomy (two courses, six months each)								
Practical Anatomy (twelve months)								
Chemistry (one course of six months)								
Practical Chemistry (three months)								
Materia Medica and Pharmacy (six months)								
Practical Pharmacy (one course of six months at laboratory, or apprenticeship for two years)								
Institutions of Medicine, or Physiology (six months)								
Practice of Medicine (one course of six months)								
Clinical Medicine (six months)								
Principles and Practice of Surgery (two courses of six months each)								
Military Surgery (if selected for second course of surgery, six months)								
Clinical Surgery (six months)								
Midwifery and Diseases of Women and Children (one course of three months)								
Medical Jurisprudence (one course of three months)								
Botany (three months)								
Hospital, Medical and Surgical, of not less than 80 patients (24 months); or 21 months, together with six months of a recognised dispensary								
Dispensary (for part of hospital attendance)								
Classes, &c., not Prescribed.								

(No. 4.)

No. 1.

SURGEONS' HALL.

Annual Examinations in Latin and in Mechanical Philosophy.

CANDIDATES will be received in the order of the numbers on their tickets. The first list will be admitted on Saturday, 9th December, at a quarter to One P. M. On Thursday, 7th December, when, by the laws of the College, the list of the candidates must be completed, the other day or days of examination will be fixed, certain numbers allocated to each day, and the days and numbers announced by the officer in a written placard at the glass door. Candidates who find it inconvenient to attend on the days allotted to them, may exchange their cards with others. No card will be received, unless the name, address, and place of birth of the individual presenting it, have been written on the back of it by him. Each candidate to bring pen and ink. Paper will be supplied.

The examinations in Latin and those in Mechanical Philosophy, though conducted together, are quite independent of each other. It is in the option of students to take one of these and omit the other, as each will be the subject of separate decision. For all other information see the printed Regulations, Chap. V.

(Endorsement.)

Name - - - - -	Charles W. Fettes.
Address - - - - -	13, Hill-place.
Place of Birth - - - -	Laurencekirk.

No. 2.

SURGEONS' HALL.

Annual Examinations in Latin and in Mechanical Philosophy.

CANDIDATES will be received in the order of the numbers on their tickets. The first list will be admitted on Saturday, 9th December, at a quarter to One P. M. On Thursday, 7th December, when, by the laws of the College, the list of the candidates must be completed, the other day or days of examination will be fixed, certain numbers allocated to each day, and the days and numbers announced by the officer in a written placard at the glass door. Candidates who find it inconvenient to attend on the days allotted to them, may exchange their cards with others. No card will be received, unless the name, address, and place of birth of the individual presenting it, have been written on the back of it by him. Each candidate to bring pen and ink. Paper will be supplied.

The examinations in Latin and those in Mechanical Philosophy, though conducted together, are quite independent of each other. It is in the option of students to take one of these and omit the other, as each will be the subject of separate decision. For all other information see the printed Regulations, Chap. V.

(Endorsement.)

Name - - - - -	William Hart.
Address - - - - -	4, Albany-street.
Place of Birth - - - -	Liverpool.

No. 4.

SURGEONS' HALL.

Annual Examinations in Latin and in Mechanical Philosophy.

CANDIDATES will be received in the order of the numbers on their tickets. The first list will be admitted on Saturday, 9th December, at a quarter to One P. M. On Thursday, 7th December, when, by the laws of the College, the list of the candidates must be completed, the other day or days of examination will be fixed, certain numbers allocated to each day, and the days and numbers announced by the officer in a written placard at the glass

glass door. Candidates who find it inconvenient to attend on the days allotted to them, may exchange their cards with others. No card will be received, unless the name, address, and place of birth of the individual presenting it, have been written on the back of it by him. Each candidate to bring pen and ink. Paper will be supplied.

The examinations in Latin and those in Mechanical Philosophy, though conducted together, are quite independent of each other. It is in the option of students to take one of these and omit the other, as each will be the subject of separate decision. For all other information see the printed Regulations, Chap. V.

(Endorsement.)

Name - - - - -	Charles Livingstone.
Address - - - - -	25, Dublin-street.
Place of Birth - - - -	Perthshire.

No. 6.

SURGEONS' HALL.

Annual Examinations in Latin and in Mechanical Philosophy.

CANDIDATES will be received in the order of the numbers on their tickets. The first list will be admitted on Saturday, 9th December, at a quarter to One P.M. On Thursday, 7th December, when, by the laws of the College, the list of the candidates must be completed, the other day or days of examination will be fixed, certain numbers allocated to each day, and the days and numbers announced by the officer in a written placard at the glass door. Candidates who find it inconvenient to attend on the days allotted to them, may exchange their cards with others. No card will be received, unless the name, address, and place of birth of the individual presenting it, have been written on the back of it by him. Each candidate to bring pen and ink. Paper will be supplied.

The examinations in Latin and those in Mechanical Philosophy, though conducted together, are quite independent of each other It is in the option of students to take one of these and omit the other, as each will be the subject of separate decision. For all other information see the printed Regulations, Chap. V.

(Endorsement.)

Name - - - - -	A. F. Richmond.
Address - - - - -	9, Rutland-square.
Place of Birth - - - -	London.

No. 15.

SURGEONS' HALL.

Annual Examinations in Latin and in Mechanical Philosophy.

CANDIDATES will be received in the order of the numbers on their tickets. The first list will be admitted on Saturday, 9th December, at a quarter to One P.M. On Thursday, 7th December, when, by the laws of the College, the list of the candidates must be completed, the other day or days of examination will be fixed, certain numbers allocated to each day, and the days and numbers announced by the officer in a written placard at the glass door. Candidates who find it inconvenient to attend on the days allotted to them, may exchange their cards with others. No card will be received, unless the name, address, and place of birth of the individual presenting it, have been written on the back of it by him. Each candidate to bring pen and ink. Paper will be supplied.

The examinations in Latin and those in Mechanical Philosophy, though conducted together, are quite independent of each other. It is in the option of students to take one of these and omit the other, as each will be the subject of separate decision. For all other information see the printed Regulations, Chap. V.

(Endorsement.)

Name - - - - -	Pringle Hughes.
Address - - - - -	28, Greenside-street.
Place of Birth - - - -	Northumberland.

No. 55.

SURGEONS' HALL.

Annual Examinations in Latin and in Mechanical Philosophy.

CANDIDATES will be received in the order of the numbers on their tickets. The first list will be admitted on Saturday, 9th December, at a quarter to One P.M. On Thursday, 7th December, when, by the laws of the College, the list of the candidates must be completed, the other day or days of examination will be fixed, certain numbers allocated to each day, and the days and numbers announced by the officer in a written placard at the glass door. Candidates who find it inconvenient to attend on the days allotted to them, may exchange their cards with others. No card will be received, unless the name, address, and place of birth of the individual presenting it, have been written on the back of it by him. Each candidate to bring pen and ink. Paper will be supplied.

The examinations in Latin and those in Mechanical Philosophy, though conducted together, are quite independent of each other. It is in the option of students to take one of these and omit the other, as each will be the subject of separate decision. For all other information see the printed Regulations, Chap. V.

(Endorsement.)

Name - - - - -	Alexander L. Gracey.
Address - - - - -	2, Drummond-street.
Place of Birth - - - -	Dublin.

(No. 5.)

Surgeons' Hall, Edinburgh, 15th December 1849.

One or more of the following sentences is required to be translated:—

I.

From GREGORY; "*Conspectus,*" (48.)

Unde vero morbi, vel morborum causæ? Certe ab ipsâ imprimis machinæ animalis constitutione. Ut vitrum ex officinâ prodit fragile, sic homines debiles, caduci, morbis opportuni, nascuntur. Hinc multi morbi, causâ modo excitante idoneâ admotâ, omnibus communes.

II.

From CELSUS. (Lib. VI. Cap. IX.)

In dentium dolore, qui ipse maximis tormentis annumerari potest, vinum ex toto circumcidendum est: cibo quoque primò abstinendum, deinde eo modico mollique utendum, ne mandentis dentes irritet: tum extrinsecus admovendus per spongiam vapor aquæ calidæ; imponendumque ceratum, lanâque id comprehendendum, caputque velandum est.

III.

From CICERO; "*De Senectute,*" (XIX.)

Horæ cedunt, et dies, et menses, et anni: nec præteritum tempus unquam revertitur: nec, quid sequatur, sciri potest. Quod cuique temporis ad vivendum datur, eo debet esse contentus. Breve enim tempus ætatis, satis est longum ad benè honestèque vivendum.

IV.

From HORACE; "*Carminum,*" Lib. IV. (9.)

Non possidentem multa vocaveris
Rectè beatum: rectiùs occupat
Nomen beati, qui Deorum
Muneribus sapientur uti,
Duramque callet pauperiem pati,
Pejusque leto flagitium timet;
Non ille pro caris amicis
Aut patriâ timidus perire.

Surgeons' Hall, Edinburgh, 21st December 1850.

One at least of the following sentences is required to be translated:—

I.

From CELSUS: (Cap. IX.)

Cognitis indiciis, quæ nos vel spe consolentur vel metu terreant, ad curationes morborum transeundum est. Ex his quædam *communes* sunt, quædam *propriæ*. Communes quæ plurimis morbis opitulantur. Propriæ quæ singulis. Ante de communibus dicam. Ex quibus tamen quædam non ægros solùm sed sanos quoque sustinent, quædam in adversâ tantùm valetudine adhibentur.

II.

From SALLUST: (Jugurtha XIV.)

Conclusion of Adherbal's Speech to the Senate.

Nunc neque vivere lubet, neque mori licet sine dedecore. Patres Conscripti, per vos, per liberos atque parentes, per majestatem populi Romani, subvenite misero mihi; ite obviàm injuriæ; nolite pati regnum Numidiæ, quod vestrum est, per scelus et sanguinem familiæ nostræ tabescere.

III.

From CÆSAR: ("*Commentarii*," Lib. VI. Cap. 16.)

Of the Gauls.

Qui sunt affecti gravioribus morbis, quique in prœliis periculisque versantur, aut pro victimis homines immolant, aut se immolaturos vovent, administrisque ad ea sacrificia Druidibus utuntur; quòd, pro vitâ hominis nisi hominis vita reddatur, non posse aliter Deorum immortalium numen placari, arbitrantur: publiceque ejusdem generis habent instituta sacrificia.

IV.

From VIRGIL: ("*Æneidos*," Lib. VI. 434.)

Proxima deinde tenent moesti loca, qui sibi letum
Insontes peperere manu, lucemque perosi
Projecere animas. Quàm vellent æthere in alto
Nunc et pauperiem et duros perferre labores!
Fas obstat, tristique palus inamabilis undâ
Alligat, et novies Styx interfusa coërcet.

Surgeons' Hall, Edinburgh, 13th December 1851.

I.

GREGORY: ("*Conspectus*," 164.)

Voluptas et Dolor (ut pulchra *Socratis* fabula docet) sorores fuerunt, utcunque dissimiles, diversamque sortem expertæ; altera nimirum optata et grata omnibus, altera pariter invisa; quas tamen Jupiter ita sociavit, et tam indissolubili vinculo conjunxit, ut quamvis naturâ contrarias, et diversè spectantes, quicunque alterutram amplectitur, alteram trahat simul.

II.

CICERO: ("*De Amicitiâ*," XV.)

Hæc enim est tyrannorum vita; in quâ nimirum nulla fides, nulla caritas, nulla stabilis benevolentiæ potest esse fiducia; omnia semper suspecta, atque solicita; nullus locus amicitiæ. Quis enim aut eum diligat, quem metuit; aut eum, a quo se metui putat?

III.

VIRGIL: ("*Æneis*," Lib. I. v. 742.)

Hic canit errantem lunam, solisque labores;
Unde hominum genus, et pecudes; unde imber et ignes;
ARCTURUM, pluviasque HYADAS, geminosque TRIONES;
Quid tantùm Oceano properent se tinguere soles
Hiberni, vel quæ tardis mora noctibus obstet.

IV.

TACITUS: ("*Annalium*," Lib. VI. 22.)

Reflections on Astrology.

Sed mihi in incerto judicium est, fatone res mortalium an fortè volvantur: quippe sapientissimos veterum diversos reperies, ac multis insitam opinionem, non initia nostrî, non finem, non denique homines diis curæ. Ideo creberrimè tristia in bonos, læta apud deteriores esse. Contra alii, fatum quidem congruere rebus putant, sed non è vagis stellis, verùm apud nexus naturalium causarum; neque mala, vel bona, quæ vulgus putet: multos, quì conflictari adversis videantur, beatos; ac plerosque, quamquam magnas per opes, miserrimos: si illi gravem fortunam constanter tolerent, hi prosperâ inconsultè utantur.

Surgeons' Hall, Edinburgh, 20th December 1851.

I.

CELSUS: ("*De Medicinâ*,") Lib. VI. Cap. x.

De Tonsillis et earum curâ.

Si vero tonsillæ sine exulceratione per inflammationem intumuerunt, caput velandum est, extrinsecus is locus vapore calido fovendus: multâ ambulatione utendum; caput in lecto sublime habendum; gargarizandumque est ex reprimentibus. Cibus quoque in hac valetudine lenis esse debet, ne exasperet.

Si, pure substante, non rumpuntur hi tumores, incidendi sunt.

II.

SALLUST: ("*Catilina*," V.)

Lucius Catilina, nobili genere natus, fuit magnâ vi et animi et corporis, sed ingenio malo pravoque. Huic ab adolescentiâ bella intestina, cædes, rapinæ, discordia civilis, grata fuêre: ibique juventutem suam exercuit. Corpus patiens inediæ, vigiliæ, algoris, suprà quàm cuique credibile est. Animus audax, subdolus, varius, cujuslibet rei simulator ac dissimulator; alieni appetens, sui profusus, ardens in cupiditatibus; satis loquentiæ, sapientiæ parum.

III.

CÆSAR: ("*De Bello Gallico*," Lib. V. Cap. xii.)

[Part of the Description of Britain.]

Hominum est infinita multitudo, creberrimaque ædificia ferè Gallicis consimilia: pecorum magnus numerus. Utuntur aut ære, aut annulis ferreis ad certum pondus examinatis, pro nummo. Nascitur ibi plumbum album in mediterraneis regionibus, in maritimis ferrum, sed ejus exigua est copia: ære utuntur importato.

IV.

OVID: ("*Metamorphos.*" Lib. XV. v. 75.)

[From the Speech of Pythagoras against Animal Food.]

Parcite, mortales, dapibus temerare nefandis
Corpora. Sunt fruges, sunt deducentia ramos
Pondere poma suo, tumidæque in vitibus uvæ.
Prodiga divitias alimentaque mitia Tellus
Suggerit, atque epulas sine cæde et sanguine præbet.
Carne feræ sedant jejunia; nec tamen omnes.

At vetus illa ætas, cui fecimus *Aurea* nomen
Fœtibus arboreis, et, quas humus educat, herbis,
Fortunata fuit, nec polluit ora cruore.

Surgeons' Hall, Edinburgh, 11th December 1852.

I.

From GREGORY: (*Conspectus* 230.)

Auris vero, quæ vocatur musica, non omnibus datur; cujus rei ratio hactenus latet: nullo modo pendet ab acutiore vel obtusiore auditu. Semi-surdi nonnunquam musicæ satis periti sunt et amantissimi. Facultas ipsa Naturæ donum est, nullo studio acquirenda: Cultu vero et usu, non secus ac reliquæ hominis facultates, mirum in modum acuitur et roboratur.

II.

From SERVIUS SULPITIUS' Letter to CICERO, on the Death of his Daughter TULLIA. (*Ad Famil.* Lib. IV. Ep. 5.)

Ex Asia rediens, cum ab Æginâ Megaram versùs navigarem, cœpi regiones circum circà prospicere: post me erat Ægina, ante Megara, dextrâ Piræeus, sinistrâ, Corinthus: quæ oppida quodam tempore florentissima fuerunt; nunc prostrata et diruta ante oculos jacent. Cœpi egomet mecum sic cogitare: hem, nos homunculi indignamur, si quis nostrûm interiit, aut occisus est, quorum vita brevior esse debet, cùm uno loco tot oppidorum cadavera projecta jaceant.

III.

From TACITUS: ("*Annal.*" Lib. II. 61.)

GERMANICUS IN EGYPT.

Cæterùm Germanicus aliis quoque miraculis intendit animum; quorum præcipua fuêre Memnonis saxea effigies, ubi radiis solis icta est, vocalem sonum reddens: disjectasque inter et vix pervias arenas, instar montium eductæ Pyramides, certamine et opibus regum: lacusque, effossâ humo, superfluentis Nili receptacula.

IV.

From SALLUST: (*Jugurtha* IV.)

Sæpe audivi civitatis nostræ præclaros viros solitos ita dicere, quum majorum imagines intuerentur, vehementissimè sibi animum ad virtutem accendi. Scilicet non ceram illam, neque figuram, tantam vim in sese habere; sed memoriâ rerum gestarum eam flammam egregiis viris in pectore crescere, neque priùs sedari, quàm virtus eorum famam atque gloriam adæquaverit.

Surgeons' Hall, Edinburgh, 18th December 1852.

I.

From GREGORY: (*Conspectus* 228.)

Soni magnitudo vel claritas pendet a vi seu magnitudine tremorum, quos corpus sonans aëri impertit. Gravitas a numero tremorum qui dato tempore absolvuntur. Sunt tamen certi fines, quos citra et ultra, vel nullus sonus est, vel acerrimus, et auri ingratissimus, vixque tolerabilis.

II.

From CICERO to TYRO, whom he had left ill in Greece. (*Ad Famil.* Lib. XVI. 9.)

Ad quintum Kalendarum Decembris, servus Cnæii Planci tandem mihi a te expectatissimas literas reddidit datas Idibus Novembris, quæ me molestiâ valde levârunt; utinam omnino liberâssent. Nunc quidem ego te hortor, ut omnem diligentiam adhibeas ad convalescendum. Scio te omnia facturum, ut nobiscum quamprimum sis; sed tamen ita velim, ut ne quid properes. Reliquum est, ut hoc a te petam, ne temerè naviges. Solent nautæ festinare, quæstûs sui causâ. Cautus sis, mi Tyro; mare magnum et difficile tibi restat. Etiam atque etiam, noster Tyro, vale.

III.

From LIVY: (Lib. XXI. 28.)

ON THE PASSAGE OF THE RHONE BY HANNIBAL'S ARMY.

Galli occursant in ripam cum variis ululatibus cantuque moris sui, quatientes scuta super capita, vibrantesque dextris tela: quanquam et ex adverso terrebat tanta vis navium cum ingenti sono fluminis, et clamore vario nautarum et militum, qui nitebantur perrumpere impetum fluminis, et qui ex alterâ ripâ trajicientes suos hortabantur.

IV.

From Celsus: (Lib. V. Cap. 26).

Ubi aliquis ictus est, qui servari potest, protinus prospicienda duo sunt: ne sanguinis sit profusio, neve inflammatio. Si profusionem timemus, siccis linamentis vulnus implendum est, supraque imponenda spongia ex aquâ frigidâ expressa, ac manu supra comprimenda. Si parum sic sanguis conquiescit, sæpius linamenta mutanda sunt. Et si sicca parum valent, aceto madefacienda sunt.

Surgeons' Hall, Edinburgh, 19th December 1853.

I.

From Cæsar: (*Comment.* Lib. VI. Cap. 14.)

Druides a bello abesse consuêrunt, neque tributa unà cum reliquis pendunt; militiæ vacationem omniumque rerum habent immunitatem. Tantis excitati præmiis, et suâ sponte multi in disciplinam conveniunt, et a parentibus propinquisque mittuntur. Magnum ibi numerum versuum ediscere dicuntur. Itaque annos nonnulli vicenos in disciplinâ permanent.

II.

From Cicero: (*Oratio pro Marcello.*)

Animum vincere, iracundiam cohibere, victoriam temperare, adversarium nobilitate, ingenio, virtute præstantem non modo extollere jacentem, sed etiam amplificare ejus pristinam dignitatem; hæc qui faciat, non ego eum cum summis viris comparo, sed simillimum deo judico.

III.

From Virgil: (*Æneis*, Lib. I. 148.)

Ac, veluti magno in populo quum sæpe coorta est
Seditio, sævitque animis ignobile vulgus,
Jamque faces et saxa volant; furor arma ministrat:
Tum, pietate gravem ac meritis si fortè virum quem
Conspexêre, silent, adrectisque auribus adstant;
Iste regit dictis animos, et pectora mulcet:
Sic cunctus pelagi cecidit fragor, &c. &c.

IV.

From Seneca: (*Ad Lucilium*, Epist. LXXXIV.)

Apes debemus imitari, quæ vagantur, et flores ad mel faciendum idoneas carpunt; deinde quidquid attulêre disponunt, ac per favos digerunt. De illis non satis constat, utrum succum ex floribus ducunt, qui protinus mel sit, an quæ collegêrunt, mutent. Quibusdam enim placet non *faciendi* mellis scientiam esse illis, sed *colligendi*.

Mechanical Philosophy.

1. What do you mean by the *inertia* of a body?
2. How is the common thermometer constructed and graduated?
3. By what property of the pendulum is it eminently fitted to measure time? Describe the pendulum of the common clock, and the method of regulating it? How is the vibration of it affected by being carried from the polar to the equatorial regions, or the reverse? and what inference may be deduced from this experiment?

Surgeons' Hall, Edinburgh, 17th December 1853.

I.

From Sallust: (*Catilina* XXXIII.)

Message of Manlius in behalf of the Conspirators.

Deos hominesque testamur, imperator, nos arma neque contra patriam cepisse, neque quo periculum aliis faceremus, sed uti corpora nostra ab injuriâ tuta forent; qui miseri, egentes, plerique patriæ, sed omnes famâ atque fortunis expertes sumus. Nos non imperium neque divitias petimus, quarum rerum causâ bella atque certamina omnia inter mortales sunt; sed libertatem, quam nemo bonus, nisi cum animâ simul, amittit.

From

II.

From HEBERDEN: (*Comment.* Cap. XXXIX.)

Febris hecticæ mentio sæpe fit in medicorum libris, neque raro quoque in sermone quotidiano: tamen haud facilè inveniemus eam adeo certis signis descriptam ut manifestum sit quid inter hanc et alias febres intersit, utque omnis de ejus naturâ dubitatio tollatur.

III.

From HORACE: (*Carmen Seculare.*)

Dî, probos mores docili juventæ,
Dî, senectuti placidæ quietem,
Romulæ genti date remque prolemque
Et decus omne.

Jam Fides, et Pax, et Honos, Pudorque
Priscus, et neglecta redire Virtus
Audet; adparetque beata pleno
Copia cornu.

IV.

From SENECA: (*De Brevitate Vitæ*, Cap. II.)

Quid de rerum naturâ querimur? illa se benignè gessit; vita, si scias uti, longa est. Alium insatiabilis tenet avaritia: alium in supervacuis laboribus operosa sedulitas: alius vino madet: alius inertiâ torpet: alium defatigat ex alienis judiciis suspensa semper ambitio: alium mercandi præceps cupiditas circa omnes terras, omnia maria, spe lucri ducit: adeo ut quod apud maximum poetarum more oraculi dictum est verum esse non dubitem:

"Exigua pars est vitæ quam nos vivimus."

Mechanical Philosophy.

1. What is the weight of the atmosphere on each square inch of surface? and what is the height of the columns of water and of mercury respectively, which it will sustain?

2. What is the law which determines the direction of the reflection of a ray of light from a plane surface?

3. What is meant by the specific gravity of a body? and how is it ascertained in solid and fluid bodies respectively?

Surgeons' Hall, Edinburgh, 10th December 1854.

I.

From CICERO: (*De Nat. Deorum*, Lib. II. 57.)

Nasus ita locatus est, ut quasi murus oculis interjectus esse videatur. Auditus autem semper patet; ejus enim sensu etiam dormientes egemus; a quo cum sonus est acceptus, etiam a somno excitamur. Flexuosum iter habet, ne quid intrare possit, si simplex et directum pateret; provisum etiam, ut si qua minima bestiola conaretur irrumpere, in sordibus aurium, tanquam in visco, inhæresceret.

II.

From OVID: (*Met.* Lib. III. v. 407,) *Story of Narcissus.*

Fons erat illimis, nitidis argenteus undis,
Quem neque pastores, neque pastæ monte capellæ
Contigerant, aliudve pecus; quem nulla volūcris,
Nec fera turbârat, nec lapsus ab arbore ramus.
Gramen erat circà, quod proximus humor alebat;
Silvaque, sole lacum passura tepescere nullo.
Hìc puer, et studio venandi lassus et æstu,
Procubuit; faciemque loci fontemque secutus.

III.

From GREGORY: (*Consp.* 175.)

Varias corporum qualitates tactus percipit; duritiem, mollitiem, asperitatem, lævitatem, calorem, frigus, molem, figuram, distantiam, pressuram, pondus; raro fallax vel depravatus; quia scilicet corpora, quorum qualitates sunt explorandæ, proximè ad ipsum organum admoventur, nullo interposito *medio*, cujus varietates sensum fallere vel corrumpere possint.

Mechanical Philosophy Questions.

1. Explain and illustrate the different kinds of attraction.
2. Explain the principles of the syphon.
3. Explain the formation of dew and hoar-frost.
4. Define centrifugal and centripetal forces: illustrate their action: state the effects of centrifugal force upon our globe.

Surgeons' Hall, Edinburgh, 18th December 1854.

I.

From CICERO: (*Cato Major*, XXIII.)

Non lubet mihi deplorare vitam, quod multi, et ii docti, sæpe fecerunt. Neque me vixisse pœnitet, quoniam ita vixi ut non frustra me natum existimem; et ex hac vitâ ita discedo tanquam ex hospitio, non tanquam ex domo. . . . . O præclarum diem, cum ad illum divinum animorum concilium cœtumque proficiscar, cumque ex hâc turbâ et colluvione discedam.

II.

From VIRGIL: (*Æn.* Lib. II. 301.)

Clarescunt sonitus, armorumque ingruit horror.
Excutior somno, et summi fastigia tecti
Adscensu supero, atque arrectis auribus adsto:
In segetem veluti quam flamma, furentibus Austris,
Incidit, aut rapidus montano flumine torrens
Sternit agros, sternit sata læta, boumque labores,
Præcipitesque trahit sylvas; stupet inscius, alto
Accipiens sonitum saxi de vertice, pastor.

III.

From CELSUS: (Lib. III. Cap. 22.)

Diutiùs* sæpè et periculosiùs tabes eos malè habet quos invasit. Atque hujus quoque plures species sunt. Una est quâ corpus non alitur, et naturaliter semper aliquibus decedentibus, nullis vero in eorum locum subeuntibus, summa macies oritur; et, nisi occurritur, tollit; *ἀτροφίαν* hanc Græci vocant. Ea duabus ferè de causis incidere consuevit. Aut enim nimio timore aliquis minus, aut aviditate nimiâ plus, quam debet assumit; ita vel, quod deest, infirmat; vel, quod superat, corrumpitur.

Mechanical Philosophy Questions.

1. How is the course of a ray of light affected by passing from air into water, or the reverse?
2. What is the boiling point of water in Fahrenheit's scale? Is it the same under all circumstances? If not, by what causes is it liable to be elevated or lowered, and how can this be experimentally shown?
3. What must be the position of the centre of gravity of a body with respect to its base, in order to ensure its stability?
4. If the short arm of a lever be loaded with a weight of 2 lbs., what must be the load on the opposite arm, which is twice as long, to make the equilibrium perfect?

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* The previous chapter was on Dropsy.

Faculty of Physicians and Surgeons of Glasgow.

1. In the following list is shown the number of applicants for the surgical licence or diploma of the Faculty during each year from 1st January 1846 to 1st January 1856, as also the numbers who have passed as licentiates, and who have been rejected; also the number of fellows who have been admitted to the Faculty, during each of the 10 years.

YEARS.	Applicants for Licence of Faculty.			Fellows Admitted.
	Total.	Passed.	Rejected.	
1846 - - -	25	15	10	1
1847 - - -	23	14	9	1
1848 - - -	33	23	10	0
1849 - - -	38	30	8	1
1850 - - -	31	21	10	3
1851 - - -	44	37	7	14
1852 - - -	60	49	11	7
1853 - - -	54	42	12	3
1854 - - -	62	54	8	5
1855 - - -	52	39	13	8
	422	324	98	43

2. Candidates for the Faculty's diploma, besides having received regular instruction in the elements of mathematics and mechanical philosophy, and being well instructed in the Latin language, must have attended the following separate and distinct courses of lectures, &c., during three winter sessions of six months' duration, and three summer sessions of three months' duration, or during four such winter sessions and one summer session.

1. Anatomy - - - - - - - -	Two courses of six months.
2. Practical Anatomy - - - - -	Two courses of six months.
3. Surgery - - - - - - - -	Two courses of six months.
Or { Surgery - - - - - -	One course of six months.
{ and Military Surgery - - - -	One course of six months.
4. Chemistry - - - - - - - -	One course of six months.
5. Practical Chemistry - - - - -	One course of three months.
6. Theory or Institutes of Medicine - - -	One course of six months.
7. Practice of Medicine - - - - -	One course of six months.
8. Materia Medica - - - - - -	One course of six months.
9. Midwifery and Diseases of Women and Children	One course of six months.
10. Clinical Medicine - - - - - - -	Two courses of three months.
11. Clinical Surgery - - - - - -	Two courses of three months.
12. Medical Jurisprudence and Police - - -	One course of three months.
13. Botany - - - - - - - -	One course of three months.
14. General Hospital, with at least 80 beds - -	Twenty-one months.
15. Practical Pharmacy, at the laboratory of a surgeon or apothecary, or of a public hospital or dispensary, or at that of a chemist or druggist recognised by the Faculty - -	Six months.

In addition to the above, attendance on which is imperative, the Faculty recommend the following:

1. Lectures on the Eye, and Hospital for Eye Diseases.—(A three months' course of lectures on the Eye, with six months' attendance on an Eye Hospital, containing at least 12 beds for operation cases, will be considered equivalent to three months of a General Hospital.)
2. Lying-in Hospital.
3. Hospital for Syphilitic Diseases.
4. Pathological Anatomy.
5. Natural History and Comparative Anatomy.
6. Greek, French, German and Italian.

3. All applicants for the diploma of the Faculty must have attained the age of 21 years.

4. Each candidate for the licence is examined in Latin, and in every department of general and professional knowledge included in the Faculty's curriculum.

5. By the laws of the Faculty the candidate for its diploma has the option of being examined at the commencement of each winter session on his knowledge of the Latin language, at the end of his second winter session on the more elementary and theoretical branches, and at the close of his curriculum on the more abstruse and practical departments of professional knowledge; but a single examination at the close of their studies is generally preferred by the applicants for the licence of the Faculty. Candidates for the fellowship are subjected to a special examination.

6. The candidate is examined partly *vivâ voce* and partly by written question and answer. Anatomical and surgical preparations and specimens of the materia medica, &c. being used.

7. The time generally occupied in the examination of a candidate varies from one hour to one hour and a half.

8. The Faculty keep no record of candidates who have previously obtained licences to practise from other corporations; but it frequently happens that parties holding such licences and also university degrees in medicine are applicants for the diploma and fellowship of the Faculty.

9. On the average of the last 10 years the rejections were nearly one to four of the applicants, or 23·22 per cent.

10. Each successful candidate pays 10 *l.* as the fee for his examination and diploma. An unsuccessful candidate pays nothing for his first examination, but if again examined and rejected he pays the sum of two guineas.

11. The diploma of the Faculty confers the privilege of practising in all parts of Her Majesty's dominions, except where exclusive privileges remain in force and unrepealed.

12. The examiners of the Faculty are the Council, assisted by six examiners elected from the general body, and who must not be lecturers or teachers. Three of these are appointed annually and nine triennially, all being eligible for re-election. To each examiner is assigned a special department. Thus to one anatomy and physiology, to another chemistry and pharmacy, &c. &c.

Robert Hunter, M.D., President.

RETURNS relating to MEDICAL LICENCES granted by the UNIVERSITIES of *Oxford*, *Cambridge*, *Dublin*, *London*, *Durham*, *Edinburgh*, *Glasgow*, *St. Andrew's*, KING'S COLLEGE and MARISCHAL COLLEGE at *Aberdeen*, and QUEEN'S UNIVERSITY in *Ireland*, by the COLLEGES of PHYSICIANS, and COLLEGES of SURGEONS of *London*, *Edinburgh*, and *Dublin*, and FACULTY of PHYSICIANS and SURGEONS of *Glasgow*; and by the SOCIETY of APOTHECARIES of *London*, and the APOTHECARIES' HALL of *Ireland*.

(*Mr. Cowper.*)

Ordered, by The House of Commons, *to be Printed*,
17 *July* 1856.

[*Price* 1*s.*]

364.

Under 16 *oz.*

ANNUAL REPORT

OF

THE NATIONAL VACCINE ESTABLISHMENT. 1856.

TO the Right Honourable Sir George Grey, Bart., Her Majesty's Secretary of State for the Home Department.

Sir,

The Board of the National Vaccine Establishment have the honour to report to you, that in the course of the past year 220,639 charges of lymph have been sent out.

In addition to the ordinary supplies furnished to public institutions, both at home and abroad, a large demand has been made, as a consequence of the war, upon the resources of our establishment from various recruiting depôts and regimental hospitals, from Scutari, and from the Baltic and Black Sea fleets; it is gratifying to report that from the letters we have received there is every reason to believe that the employment of the lymph has been successful, and has protected our forces from the spread and ravages of the small pox.

The number of vaccinations reported is 128,495, of which 8,637 were performed by our stationary vaccinators in the metropolis. The letters received from correspondents have amounted to 10,539.

Out of this mass of communications the Board would particularly direct your attention to the following extracts, which testify to the efficacy of the lymph, and the confidence that is placed in it by medical men and the public at large.

The superintendent of vaccination writes from Colombo, Ceylon, May 9, 1855: "I am happy to be able to inform you that the vaccine lymph, both in the glass tubes and on ivory points, retained its prophylactic powers, and that the vaccinators, under my direction, continue to use virus thus obtained. I also distributed the supply you sent me among those engaged in vaccination in the other provinces in Ceylon, and I doubt not that they realised the same happy results." The happy results alluded to refer to a previous communication from the agent in London, stating that the points which had been furnished about 12 months previously from our establishment, "had been the means of saving hundreds of lives, as the island, before the application of the vaccine lymph, had been fearfully losing its inhabitants for the want of it."

The Rev. C. Causten writes from Sandwick Manse, Orkneys, requesting a supply of lymph, and states that he had vaccinated 30 infants from the former supply with perfect success. "My people," he continues, "are now, I fear, slow in coming forward for vaccination, as the small pox is almost forgotten by them, for it is almost 30 years since I began to vaccinate, and during that time no native of this parish has taken the small pox either here or abroad. The disease was introduced here about 20 years ago by a woman from another parish, who had it at the time of her confinement, and both she and her infant died; but it did not spread, as there seemed to be no fuel for the flame."

The applications from Ireland continue to be as frequent as ever, from the impossibility which is experienced of keeping up a sufficient store of lymph from the local resources. Numerous letters, also, from private practitioners, prove that the same difficulty is extensively felt in this country.

It is still a subject of regret that the employment of vaccination is materially impeded in our colonies, as well as in the mother country, by the carelessness, the wilful negligence, and prejudices of the poor and ignorant; from which charge we are sorry to say that some of those in the wealthier classes of society are not wholly exempt. It is assigned, as one of the reasons for application to our Board, that the parents of children requiring vaccination prefer the lymph furnished directly from our establishment to that which is obtained from patients vaccinated in the country districts.

The effect of the "Vaccination Extension Act" cannot, for some years, be satisfactorily ascertained, but the experience of this Board affords the strongest evidence that there would be no adequate means of testing it at all without an unfailing central source of supply. It is admitted by almost all our correspondents, that local resources are quite inadequate to keeping up a constant store of efficient lymph, and that, if no national provision were made for this purpose, the progress of vaccination would be speedily arrested.

We have, &c.
(signed) *John Ayrton Paris*,
President of the Royal College of Physicians.
William Lawrence,
President of the Royal College of Surgeons.
W. E. Page, M.D.,
Censor of the Royal College of Physicians.
C. Hue, M.D., Registrar.

NATIONAL VACCINE BOARD.

ANNUAL REPORT
OF
THE NATIONAL VACCINE BOARD. 1856.

(Presented to Parliament by Her Majesty's Command.)

Ordered, by The House of Commons, to be Printed,
18 *July* 1856.

370.

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COMPULSORY VACCINATION.

RETURN to an Order of the Honourable The House of Commons, dated 11 July 1855;—*for*,

A COPY "of a LETTER, dated the 30th day of June 1855, addressed to the President of the Board of Health, by *John Gibbs*, Esquire, entitled 'COMPULSORY VACCINATION, briefly considered in its Scientific, Religious, and Political Aspects.'"

THE COMPULSORY VACCINATION ACT briefly considered in its Scientific, Religious, and Political Aspects.

To the Right Honourable Sir *B. Hall*, Bart., M. P., President of the Board of Health, &c., &c., &c.

Maze Hill Cottage, St. Leonards-on-Sea,
30 June 1855.

Sir,

HAVING learned that it is under consideration to place the working of the Compulsory Vaccination Act under the control of the Board of Health, and to extend the provisions of that statute to adults, I beg to invite your special attention to some facts and arguments in opposition to the proposed measure, as well as to the Act of 1853.

Compulsory vaccination briefly considered in its scientific, religious, and political aspects.

There is no subject upon which so many otherwise well-informed people betray such ignorance and credulity, as vaccination; and therefore it is that the partizans of this practice cast away every gentlemanly feeling, disregard every principle of justice, violate the spirit of freedom, outrage the precepts of Christianity, trample upon common sense, and betray their own best rights and dearest interests.

The Compulsory Vaccination Act is the first direct aggression upon the person of the subject in medical matters which has been attempted in these kingdoms. It invades in the most unexampled manner the liberty of the subject, and the sanctity of home. It not only unspeakably degrades the free-born Briton by depriving him of liberty in a personal matter, but denies him the possession of reason; outrages some of the finest feelings of the human heart, those feelings which have their origin in parental love, that still bright spark of the Divine nature breathed into man by his Heavenly Father; sets at nought parental responsibility, and constrains the parent either to violate his deliberate convictions, and even his religious scruples, or boldly to defy an unjust law.

Statute of 1853.

The pith of this statute is in the 2d and 9th clauses, which enact that the parent or guardian of every child born in England after the 1st August 1853, shall cause it to be vaccinated within a specified time after birth, unless vaccination be postponed under a medical certificate, or series of certificates, of unfitness, and that a pecuniary penalty shall be inflicted for non-compliance with the requirements of the Act.

Scientific aspect.

Now by what pretext is it attempted to justify such an outrage upon the constitutional liberties and natural rights of the subject? And, if vaccination be a blessed boon, is it not strange that, in Jenner's own land of thoughtful Englishmen, after the experience of half a century, during which it has been fostered by the State, a practice which appeals so strongly to human hopes and fears can be propagated only by penalties.

Objections.

Wherefore, then, is vaccination held in abhorrence by so many? Have those who reject it no weighty reasons to justify their rejection? They do not believe that it affords an efficient and assured protection against the invasion of small-pox; they have a natural disgust to the idea of transferring to the veins of their children a loathsome virus derived from the blood of a diseased brute, and transmitted through they know not how many unhealthy human mediums; they have a dread, a conviction, that other filthy diseases, tending to embitter and shorten life, are frequently transmitted through and by the vaccine virus; they cannot bring themselves to believe that, under any circumstances, the true way to health and longevity can be to corrupt the blood and lower the vital energies by the infusion of a poison and its consequent train of morbid actions; and further, they have a conscientious conviction that voluntarily to propagate disease is to fly in the face of God, and to violate that precept, which says, "Do "thyself no harm."

Forcible philanthropy.

Are such scruples and objections entitled to no respect? Should they be permitted to have no force? Are they capable of no justification? Should the sole answer to them be a Coercion Act? Such is not the best way to disarm hostility, and to ensure conviction. Who would put faith in the professions of the philanthropist who should threaten the object of his beneficence with fine or imprisonment, if he should not accept the proffered boon? Or who could receive with cordiality and respect the doctor of physic who should thunder at the door, armed with scab and lancet, threatening to assault the inmates therewith, and although he should protest that he was bent upon a mission of mercy, who could avoid suspecting that his real objects were power and gain? If vaccination be indeed a blessing which must needs be showered upon the land, would it not better become a wise Government and a free people to commend opinions by disseminating information upon the subject than to attempt to make unconverted converts by force?

Doubts of the profession.

What reasons can the advocates of vaccination assign for the faith they hold? Scarcely one of them has ever investigated the subject scientifically, they cannot plead even the unanimity of the profession on their side. "In the public mind "extensively," says the "Lancet," of 21st May 1853, "and to a more limited "extent, in the profession itself, doubts are known to exist as to the efficacy and "eligibility of vaccination. The failures of the operation have been numerous "and discouraging."

Failures of vaccination.

Vaccination, then, by the confession of the vaccinators themselves, is not an unfailing protection against small-pox. The experience of most persons will testify to the same effect, and ample corroborative proof may be found in the returns of the Registrar-general. I cannot allow myself to make use of any extracts from these important and able papers, without at the same time respectfully and thankfully acknowledging my many obligations both to the Registrar-general and to Mr. Thomas Mann, for the courtesy and kindness with which, on various occasions, they have complied with my requests. In No. 10, Vol. 15, for the week ending 11th March 1854, we find, "A grocer died in South-street, "Chelsea, at the age of 50 years, 'of confluent small-pox' (14 days). He had "been vaccinated when one year old." In No. 45, Vol. 13, we read: "In "the sub-district of Haggerstone West, at 46, Essex-street, on the 1st of "November, the daughter of a bricklayer, aged five years, died of 'variola con-"'fluens' (nine days), vaccinated with effect when six months old, marks per-"fect." Mr. Bowring mentions that "four out of a family of seven have been "attacked, and the survivors are still suffering under the disease. All were "vaccinated between the ages of four and six months; the cicatrices still per-"fect." He also records a death from small-pox without vaccination, and adds "a prejudice against vaccination, of which this is another instance, is "gaining ground in my district." It would appear that, by a prejudice, Mr. Bowring must mean an unfavourable opinion founded on experience. To proceed: In No. 41, Vol. 13, we find, "At 82, Earl-street, Lisson Grove, the "daughter of a bottle merchant, aged one year, died from 'confluent small-"'pox (14 days), vaccinated seven days previously.' The medical cer-"tificate adds, 'vaccinated on the 23d of September, in two points on each "'arm. Small-pox first showed on the skin on the 30th. Both diseases pro-"'gressed in a modified form for five days, when the child fell into a typhoid "'state.'" In this case, small-pox and cow-pox have possession together.

Which

Which of them killed the patient? The number or the week ending 25th of March 1854, furnishes another instance of the failure of vaccination to protect. "On the 17th of March the son of an ostler died, aged six years, small-pox "(five days), vaccinated."

The Weekly Return, No. 14, Vol. 15, for the week ending Saturday, 8 April 1854, furnishes similar evidence:—

"Six deaths occurred from small-pox: three of these, of which the following "are the particulars, in the Small-pox Hospital.

"On 31st March, a boy, aged 10 years, from Holborn Union; small-pox "confluent (12 days), unprotected.

"On 1st April, a boy from Somers Town, aged 5 years, small-pox confluent, "modified (9 days). He had been vaccinated at the age of four months; one "cicatrix.

"On 7th April, the wife of a labourer, from Lambeth, aged 22 years; small-"pox confluent, unmodified (8 days); vaccinated in infancy, in Suffolk; two "good cicatrices."

In the Quarterly Return, No. 20, 1853, at page 42, we find:—"Chorlton, "Hulme. The mortality of last quarter has been heavy: 22 deaths have "occurred from scarlatina, 16 from hooping-cough, and 7 from small-pox; "5 members of one family suffered from the last disease most severely, the "father and 4 children. They had all been previously vaccinated, and, as "reported, with success. Two died; and a boy, who had not only been "vaccinated, but previously had the small-pox, and was very much disfigured, "was one of the victims. This manifests a very strong predisposition in some "families for certain diseases."

In No. 17, under the head of Taunton, the following appears:—"There has "been one death from small-pox, that of a male, 20 years of age, vaccinated in "childhood." In No. 19, it is stated, under the same head:—"Taunton. "Autumnal diarrhœa has been prevalent, but not of a severe character. In "other respects the district has been free from disease."

Taunton is not specially mentioned in Nos. 18 and 20. In connexion with the apparent small mortality from small-pox, and the generally very healthy state of the place, the following extract from the "Lancet" of 2 July 1853, is particularly deserving of notice:—

"At Taunton, Mr. White reports that vaccination has become almost extinct, "and that in a population of between 4,000 and 5,000, not one case has offered "for vacciuation in the last two and a half years."

Do not these facts suggest that there may be some protection against small-pox other than vaccination?

Small-pox Hospital.

Many similar extracts might be made, but enough. Should further evidence be desired, the returns may be consulted with advantage. However, I cannot refrain from adding that during a period of 16 years, ending in 1851, "rather "more than half the patients admitted into the (Small-pox) Hospital had been "previously vaccinated" (*Medical Times*, 27 August 1853); and that out of 800 patients admitted into the same hospital in 1852, only 230 were unvaccinated.—*Lancet*, 12 Feb. 1853. In other words, 570, or considerably more than two-thirds of the whole, had been vaccinated; facts which, of themselves, strongly impugn the claims put forward on behalf of vaccination, but which seem scarcely less than conclusive when coupled with the following statement: "In the City of London Union, in which, in the year 1851" (that is, in the year preceding the one in which the 570 vaccinated patients were admitted into the Small-pox Hospital), "the births are returned 1,311, only 61 (*i. e.*, about a "twentieth of the whole number) were protected during the first year by the "lancet of the union surgeon. In St. James's, Westminster, only 38 out of 973 "births; and in St. Matthew's, Bethnal-green, consisting chiefly of poor per-"sons, only 817 out of 3,589."—*Lancet*, 2 July 1853.

It is asserted that if vaccination "does not always [does it ever, except when "it proves fatal] prevent small-pox, the attack is much milder." So mild indeed is it, that, in illustration it might be added on the authority of Dr. George Gregory, that out of 298 patients having small-pox after vaccination, who were admitted in the course of a year into the Small-pox Hospital, 31 died, and (on the authority of the Registrar-general) that, out of 432 deaths from small-pox in an epidemic season, in a period of 10 weeks, in London, 135 deaths were

returned as occurring after vaccination, and this, be it remembered, in a population, of which it is complained by the advocates of this antidote (?) that it is much neglected.

Indeed so notorious are the failures of vaccination to afford protection from the ravages of small-pox, that the "Lancet" is forced to account for them by pleading that a supply of effective lymph has never been provided; that the extension of vaccination has hitherto been entrusted to parsimonious Boards of Guardians, who not only accepted the lowest tender, but were displeased if called upon to pay for many operations; and that vaccination has never formed part of the education of medical men, but that each practitioner is left to pick up his experience, how, when, and where he can. In one place, the "Lancet" asserts that "the best mode of vaccination is still undetermined;" and in another, complains of "a want of agreement in the profession as to the essentially "pathognomonic signs of genuine vaccine inoculation." Be these accusations worth what they may, they fully justify the spreading disbelief in the efficacy of vaccination.

The human constitution.

But possibly, another reason for the failures of vaccination, may be found in the following extract from the "Destructive Art of Healing," by Dr. Samuel Dickson: "Very different have been the reasons given by Professor Alison of Edinburgh, "for his adoption of a new course. With Dr. Copland, Dr. Watson, and other "English physicians of mark, Professor Alison ascribes his change of practice "to a change in the type of disease. According to these gentlemen, human "nature has completely altered within the memory of the present generation; "nay, within the last 10 or 12 summers it is not what it was; why or where-"fore, no two of these three great doctors can agree. By one very distinguished "physician we are called to believe, that the 'malaria from wood pavement has "'caused all diseases to assume an intermittent type.' Another will have it "that the gradual substitution of 'tea and potatoes' for ale and animal food in "the diet of the people has very considerably mitigated the ferocity of all com-"plaints. Indeed, certain gentlemen, with the eminent Dr. Alison at their "head, assure us that the diseases even of horses, asses, and horned cattle, have "also, within the present century, been materially changed. By tea and "potatoes? No, but 'somehow or other.' Many doctors, nevertheless, declare "with Dr. Watson, that the human constitution has been certainly altered, since "the cholera came to England in 1832. According to these last, the cholera "has not only altered the constitutions of those it attacked, but it has 'somehow "'or other' completely changed the constitutions of those it never attacked at "all," [just as vaccination protects those who have never been vaccinated.] "But whatever be the true theory of the cause of this change of type, nothing "is more certain than that the people of these degenerate times cannot bear "depletion as they formerly did; for that fever, small-pox, chick-pox, and the "like, are no longer the inflammatory diseases they used to be. Even epilepsy, "palsy, and apoplexy, according to certain gentlemen, can no longer be treated "'antiphlogistically.' So changed, in a word, has become the type of all diseases, "the most sanguinary surgeons, Mr. Guthrie, perhaps excepted, can by no "possibility adopt the lowering measures they adopted within the last dozen years "in cases of accident, broken heads, and bones, for example, not in these islands "only, but all throughout the civilised world."

If this be so, is the experience of Jenner of the slightest worth in determining the present value of vaccination? If the human constitution, type of disease, and action of remedies, be thus all changed, have vaccination and small-pox alone escaped the common fate? Nay, the question irresistibly obtrudes itself, has vaccination had as much to do with the deterioration of the human constitution as "malaria from wood pavement," "tea and potatoes," and "cholera?" Certainly one would expect its influence to be more widely diffused than some, and more permanent than others of these causes.

What is the relative per centage of deaths from small-pox amongst the two classes, the vaccinated and the unvaccinated? The Epidemiological Society confess their inability to satisfy this inquiry.

Health and longevity.

It is not enough to investigate how far vaccination operates as a protection from small-pox. There are other points to be considered before pronouncing an opinion for or against the practice. The main question for the consideration of science is not whether vaccination be a protection against one form of disease, but

but what is its general influence upon the constitution; does it militate against health and longevity? Does it lower the vital resistance and predispose the system to receive, or does it actually introduce into it other forms of disease? In some cases, does it even predispose the system to succumb to the invasion of small-pox itself? How else shall we explain those facts of which the following is an example? "At 1, Adam's-row, Lambeth, on 2d April, the son of a smith, "aged one year, died of 'variola confluens (10 days).' The child had been "twice vaccinated, but without effect." (*Reg. Gen. Weekly Return*, No. 14, Vol. 15, week ending 8 April 1854).

What is the per centage of deaths, before a given age, from all epidemics, amongst the vaccinated as compared with the unvaccinated? What is the per centage respectively of cases of disease of the respiratory organs, of skin diseases, of scrofula, and of convulsions? What is the average duration of life amongst the vaccinated and amongst the unvaccinated? Of a thousand children vaccinated within a given time after birth, and of a thousand unvaccinated, the whole two thousand being placed as nearly as possible in like circumstances, what per centage in each thousand attain the age of puberty? These are statistics with which the advocates of vaccination have never grappled. Is it not, then, rather premature to decide that vaccination is an unmixed good, a boon which we ought not only gratefully to accept, but which we should even combine to force upon the acceptance of others? If it should appear that, before a given age, the ratio of mortality, from all causes, be the same amongst a thousand vaccinated and a thousand unvaccinated children, of what avail is vaccination? Of what import is it, as a public question, in what shape death claims his allotted number of victims, whether by small-pox, scarlet fever, or hooping cough? If the ratio of mortality should prove to be greater amongst the vaccinated than amongst the unvaccinated, should it not suggest some grave suspicions that vaccination is a curse and not a blessing?

A priori, there is nothing in vaccination to recommend it as a prophylactic. Surely then the onus rests with the compulsory vaccinators themselves to prove both the efficiency and harmlessness of their mysterious nostrum; to prove that the practice is something more than a game of chance, a throwing of the dice for life or death. This is only what prudent people would demand of the vendors of any specific. Vaccinators have no right to defy the laws of logic and common sense, by requiring that those whom they fail to convince shall prove a negative.

Deaths from vaccination.

First, then, is vaccination ever attended with risk; is it ever injurious; is it ever fatal to the recipient?

Registrar-general's returns.

In the Registrar-general's Weekly Returns, No. 30, Vol. 14, for the week ending Saturday, 23 July 1853, a few days before the passing of the Compulsory Vaccination Bill, we read: "In Bethnal-green, at 19, Warner-place, "South, on 15th July, the son of a cabinet-maker, aged seven months, died of "vaccination, erysipelas."

In the "Weekly Return," No. 13, Vol. 15, for the week ending Saturday, 1 April 1854: "In Mile End Town, Lower, the daughter of a gentleman, aged "three months, died of 'erysipelas.' The medical man states that it super-"vened on vaccination." In the "Weekly Return," No. 14, Vol. 15, it is stated that, "At the German Hospital, Dalston, both on 30th March, the son of "a mariner, aged 10 weeks, and the son of a sugar-baker, aged 13 weeks, died "of 'general erysipelas after vaccination, effusion on the brain.' The medical "attendant adds in his certificates, that 'both these children were vaccinated "'on the same day in Whitechapel-road, and were in the hospital two days.' "The cases appear to be such as demand investigation. In Ratcliff, at No. 2, "Devonport-street, on 6th April, the son of a coal merchant, aged three months, "died of 'erysipelas all over the body (one day), succeeding vaccination, which "'was considered to be fine.'"

"Demand investigation"! Does not the whole question of vaccination "demand investigation."

Other cases of legal infanticide are thus reported: "In Mile End New Town, "at No. 1, George-street, on the 17th July, the daughter of a carman, aged "three months, erysipelas after vaccination (three weeks), convulsions (24 hours)." —*Weekly Return*, week ending Saturday, 22 July 1854.

"In the South Sub-district of St. Giles, at No. 8, Parker-street, on 13th April,

" the daughter of a mason, aged one month, ' irregular vaccination, when a " ' fortnight old.' "—*Weekly Return*, for week ending 15 April 1854.

" At the ' Cock and Castle,' Kingsland, on 1st May, the son of a licensed " victualler, aged four months, died of ' vaccination, inflammation of the cel- " ' lular tissue of arm and thorax.' In Haggerston, East, at No. 54, Union- " street, on 1st May, the son of a hotpresser, aged four months, died of gangrene " after vaccination (14 days)."—*Weekly Return*, for week ending 6 May 1854.

Sequelæ of vaccination.

Having seen that vaccination is freqently an immediate cause of death, let us next inquire whether it ever introduces other diseases besides cow-pox into the system?

Medical Testimonies: Dr. Jones Quain.

Dr. Jones Quain, after describing the symptoms of cow-pox (" Manual of " Pathology," p. 366), thus concludes:—" Every eruption after vaccine not " presenting these characters is spurious."

From this, it is evident that Dr. Quain discerns a connexion between vaccination and spurious eruptions. Other medical writers are more explicit.

The " Lancet."

The " Lancet " (a zealous advocate of vaccination) says;—

" There is a belief—it may be denounced as a prejudice, but it is not the less " a deeply-rooted conviction, and one not confined to the poor or the ignorant— " that if the vaccine disease may be transmitted by inoculation, other diseases " less beneficial may be propagated in the same manner, and by the same " operation. Many a parent, of high and low degree, dates constitutional " disease in her offspring to vaccination with ' bad matter.' Who shall say " that this etiological conclusion is always false?"—*Lancet*, 15 July 1854.

" The poor are told that they must carry their children to be vaccinated by " medical men who may be strangers to them. They apprehend—and the " apprehension is not altogether unfounded, or unshared by the educated classes— " that the vaccine matter employed may carry with it the seeds of other dis- " eases not less loathsome than the one it is intended to prevent."—*Lancet*, 23 October 1854.

" So widely extended is the dread that, along with the prophylactic remedy, " something else may be inoculated, lest the germ of future diseases may be " planted, that few medical practitioners would care to vaccinate their own " children from a source, of the purity of which they were not well assured."—*Lancet*, 11 November 1854.

If such be the opinions of medical practitioners in general, let us hear the sentiments of a few of them in particular, and, to avoid the imputation of partiality, let us select indifferently from opposing medical sects, and various nations.

American Opinions: Dr. Shew.

An American medical author, Dr. Shew, commenting on a case of death from vaccination which was reported in the " New York Journal, Medical and Surgical," gives a case of a lady whose health had been injured by vaccination, and adds,—

" In two other cases, large swellings took place; one in the arm-pit, the other " in the neck, lasting for some days, and finally breaking out in running sores. " By questioning closely, we not unfrequently find that children never enjoy " good health after vaccination, however firm it might have been before."

In another place the same author says,—

" After all the recommendation that this practice has had for the last 50 years, " there are yet those who entertain honest doubts as to whether it is, after all, on " the whole, a benefit to the race. At any rate, the question, like all others, has " two sides; both of which demand our most honest consideration. It is cer- " tainly true that vaccination does not merit the encomiums which its more early " advocates put upon it; nor is it anything like capable of exterminating small- " pox from the world, as was formerly maintained; but that it will, in a large " proportion of cases, protect the system from variola, and that in those cases " where it fails of this protection it renders the disease a much milder one, no " one will pretend to deny. The only question is whether, as a whole, it is of " benefit to mankind. It is maintained that vaccination, while it affords a good " degree of protection from variola, yet renders the system more liable to other " diseases. It is affirmed also, that other diseases are introduced into the system " at the same time with the cow-pox. Long-continued and troublesome skin

" diseases

" diseases appear to follow it, and in not a few cases the child seems never to " enjoy good health after it has been performed. I think any one who has any " considerable practice among children in any great city, will be struck with " the number of cases he will find of this kind, by questioning parents on " the subject. . . . . Not only does vaccination cause subsequent unfavourable " effects, but it sometimes endangers life at the time; and in some instances " destroys the child. I have myself known most fearful convulsions to be " brought on by it, and that in children apparently of the firmest health."

Again he says,—

" I have been for years so much a disbeliever in vaccination, that I would not " be willing to have it practised upon a child of my own. I did not, however, " know that there was high authority, even among the profession, for doubting " the utility of the practice till the winter of 1850—1851. At this time Pro- Dr. Bartlett. " fessor Bartlett, a very candid and able man, and lecturer on the theory and " practice of medicine in the University of New York, quoted in his remarks " on the causes of pulmonary consumption, on the authority of two French " writers, Barthez and Rilliett, the following facts in regard to vaccination: In " 208 children that had been vaccinated, 138 died of tubercular consumption Consumption and " and 70 of other maladies; in 95 that were not vaccinated, 30 only died of vaccination. " tubercular consumption, and 65 of other diseases. The circumstances con- " nected with the two classes, the vaccinated and the unvaccinated, were, as " nearly as could be, the same. Professor Bartlett did not himself, in considera- " tion of these facts, venture an opinion as to the propriety or non-propriety of " vaccination, but would simply be understood as referring to them as matters " worthy of serious consideration."

The deduction from the facts stated by Drs. Barthez and Rilliett, according Drs. Barthez and to the rules of common arithmetic, is, that in the 208 children the mortality from Rilliett. tubercular consumption was increased four-fold by vaccination. Surely this fact, were there no other, should of itself arrest the anxious attention of every man, and constrain our legislators to pause and inquire. But the appeal seems irresistible, when supported by the additional fact, that this same dire foe of the human race (consumption) has widely spread since the introduction of vaccination, and within 10 years (ending 1853) has slain its 68,204 victims in the metropolis alone.

On the whole, Dr. Shew seems to regard vaccination as a game of chance for life or death, with the chances against the former. This gambling cannot be justified by any considerations, and it is absolutely diabolical to compel any one to be an unwilling player at such a hazard.

Another American medical author, Dr. Trall, also appears to regard vaccina- Dr. Trall. tion as a game of chance. He says—

" Physicians are not at all agreed as to the propriety of resorting to vaccina- " tion as a protection from small-pox. There is no question that it is, to a great " extent, a protection from the virulence and danger of the natural small-pox; " at the same time, there is danger of inoculating the patient with some loath- " some, and even worse disease, as s——s or scrofula, from the impossibility of " always getting a supply of matter from healthy constitutions. In either way " there is a risk to incur, and it is a delicate matter for a physician to advise on " a subject when both sides are hazardous. I am fully convinced, that if people " could bring up their children in strict physiological habits, the non-vaccinating " plan would be altogether the best; but in a city this seems next to impos- " sible, and in the country it is pretty generally neglected. Children reared " healthily in relation to food, exercise, and ventilation, have little to fear from " any disease, however contagious; they may have this (small-pox), but it will " not endanger life, nor produce much deformity, nor serious injury. I have " seen within the last year a most horridly loathsome case of scrofulous disease, " in which the patient literally rotted alive at the age of 15, from unhealthy " virus received when he was but three years of age. Parents often find some " of their children tainted with morbid humours, unlike any other member of " the family, and which they are wholly unable to account for, except on the " supposition of foul matter taken into the system by vaccination. My own " practice would be to keep children as healthy as possible; and if the small- " pox happen along, let it have its natural course. Those who have the means

" to do the same, I would advise to act accordingly ; those who live, move, eat, " and drink after the ordinary manner, would have a better chance at times by " resorting to vaccination."

Dr. Schieffer-decker.

Dr. Schiefferdecker, also an American author, is more decided in his opinions. He says,—

" Vaccination was, undoubtedly, an excellent expedient against the awful and " merciless ravages of this disease (small-pox) ; but it is now, after Priessnitz's " discovery of the use of cold water in curing disease not only unnecessary, but " even a great wrong, because it is insufficient as a preventive means, and a " cause of many diseases which would have been avoided if vaccination had not " taken place, as the hidden disease of one individual is often transferred by " vaccination to the vaccinated one. The truth of this assertion is proved by " daily experience; thus I have seen a perfectly healthy young girl, born of " healthy parents, soon after vaccination infected with a skin disease, of which " the parents of the child, who seemed very healthy, and from whom the vaccine " matter was taken, secretly suffered, as afterwards was ascertained."

Vinzenz Priessnitz.

Demurring only to the inaccurate prefix " cold," I cannot withhold my testimony in corroboration of Dr. Schiefferdecker's assertion of the efficacy of water in the hands of the late Vinzenz Priessnitz in the treatment of small-pox. When I was at Grafenberg there were at one time 13 small-pox patients, of different ages, from childhood to middle age, under treatment by the water cure. Some of the cases were light, some confluent and severe. All the patients recovered ; not one of them was marked. Here, then, is a subject deserving the attention of our rulers, if they be sincerely desirous to disarm small-pox of its terrors.

Dr. Hering.

Dr. Hering, another American author, is a firm believer in vaccination, and appeals to the practice thereof, as " offering one of the most conclusive proofs of " the truth of the homœopathic law," but confesses " it is a matter of great im- " portance to obtain the virus from a healthy child, one that is free from scrofu- " lous taint and all other hereditary and especially cutaneous diseases."

The Swedish doctor, Liedbeck, says, " I leave it undecided whether the vacci- " nation of Jenner be attended with more good than evil. In my own family " I have seen both. We have known scurf and ulcers in healthy children to be the " immediate result of vaccination, as well as eruptions and itch to be removed " [query, ' suppressed '—*J. G.*] by the same."—*British Journal of Homœopathy*, No. 30, page 479.

English Authors: Dr. Chapman.

Let us next inquire of a few English medical authors. Dr. Chapman, a homœopath, in recording a case of eczema resulting from vaccination, says (British Journal of Homœopathy, No. 29), " It may be here observed, that chronic dis- " eases may be often traced back to the period of vaccination in such a way as " to show that the virus was communicated in that way."

Dr. Newman.

Dr. Newman, an author favourable to vaccination, frankly admits, " It is of " the utmost consequence that the child from whom the infectious matter is " communicated be perfectly healthy and have no inherent taint of constitution; " for experience has taught us that the most terrible disorders have been com- " municated to healthy children from being vaccinated with lymph contami- " nated with s——s, herpes, scrofula, &c., which injurious consequences might " have been prevented by taking proper precaution that the matter was pure and " unvitiated."

Botanic Record.

The medical editor of the " Botanic Record " observes, " I may say, in fact, " that long experience with disease in its most horrible forms has taught me " that this vaccine delusion is a most prolific source of glandular disease, secon- " dary s——s, scrofula, &c., and that the sooner it is dispensed with the better it " will be for humanity."

Two medical gentlemen, Members of the House of Commons, are reported as having borne similar testimony in their places in the House :—

Dr. Michell, M.P.

" He was opposed to it " (compulsory vaccination) " on constitutional grounds, " as no parents ought to be compelled to have their children vaccinated. He " denied that vaccination was any preventive of small-pox, and [affirmed that it] " was

" was often the cause of blindness and scrofula." (Speech of Mr. W. Michell, M. D., M. R. C. S. L., in the debate in the Commons, 18 July 1854, on the Compulsory Vaccination Act Amendment Bill.)—*Medical Circular*, 26 July 1854.

" Mr. Brady stated that the Compulsory Vaccination Act had proved to be Mr. Brady, M. P.
" an admitted failure. At the present time the operator had not the means of
" knowing with certainty whether what he used was the true vaccine lymph ;
" and many cases had come within his (the honourable Member's) knowledge
" in which children had imbibed loathsome and even mortal diseases from
" having been inoculated from unhealthy persons." (Discussion in the Commons, 7 May 1855, on the annual vote of 2,000 *l.* to the National Vaccine Institution.)—*Daily News*, 8 May 1855.

Mr. W. H. Borham, an allopath, who is not only a zealous but likewise a compul- Mr. Borham.
sory vaccinator, published in the " Lancet " of 29 July 1854, a letter addressed to another compulsory vaccinator, the distinguished author of the "Compulsory Vacci-
" nation Act," in which he says, " I think, my Lord, that every medical man ought
" to vaccinate those children that he has brought into the world, for many ob-
" vious reasons ; it would make the object more complete. He can do so by
" your recent amendment, but the slight remuneration of 1 *s.* will deter many
" from accepting it, and thus it will rather tend to the dissemination of other
" diseases equally or more frightful than the small-pox. To make this clear to
" you, I will illustrate it by cases that have fallen under my own observation,
" and these are legion ; viz., many children are born apparently healthy, and
" seemingly remain so for two or three months, when an irruption breaks out
" upon the region of the a—s, precluded from observation by the apparel, but
" the face and arms appear quite healthy ; the district vaccinator is deceived by
" the appearance of these children, they are vaccinated, fine pustules are pro-
" duced, and this vitiated virus is transmitted to scores of others, who shortly
" after suffer from fulsome eruptions, or the foundation is laid for scrofula or
" tuberculous consumption. These children have been born of parents who
" were either suffering from primary or secondary s——s [It is a curious fact
" that ' half the deaths registered from this disease were in children under one
" year' (*Lancet*, 17 March 1855) ; and it is worthy of note that in many cases
" the disease was derived solely from the father, the mother never having been
" afflicted with it.—*J. G.*] during utero-gestation ; and this frightful disease,
" after the birth of the child, either lies dormant, or slightly shows itself about
" the third month, the time for vaccination. Such diseases are likely to be
" known by the medical attendant of the family, and I humbly submit it as a
" strong reason for the remunerating fee to be sufficiently large to induce him
" to vaccinate those he attends, so that such diseases may have less chance of
" being propagated."

Why the " district vaccinator" should be liable to be deceived any more than Hereditary taint.
" the medical attendant of the family" is not apparent. The fact is, that no surgeon or physician can be sure that any given lymph is unmixed with the seeds of some other disease besides those of cow-pox. There is no known medical test by which any human being can be pronounced free from the taint of some transmitted malady. What practitioner can positively assert that any given child is free from hereditary disease ? Where is concealed the seed of scrofula, consumption, insanity, or other hereditary malady, for two or more generations, finally to break forth ? What test is there to detect its presence ? Can any practitioner pretend to the knowledge of such a test ? Can the lymph be traced through some 10 or 20 transmissions ? Even if it could, if we adopt the opinion of Mr. E. Wilson, that every case of skin disease has its source in hereditary taint from the most horrible of all diseases, what lymph can be pronounced free ?

The following extract forcibly illustrates the utter impossibility of deciding who does or does not carry within him the lurking seeds of some hereditary malady :

" The doctrine of lineal consanguinity is sufficiently plain and obvious ; but Blackstone.
" it is, at the first view, astonishing to consider the number of lineal ancestors
" which every man has, within no very great number of degrees, and so many
" different bloods is a man said to contain in his veins as he hath lineal ancestors.
" Of those he has two in the first ascending degree, his own parents ; he hath
" four in the second, the parents of his father and the parents of his mother ; he

" hath eight in the third, the parents of his two grandfathers and two grand-
" mothers; and by the same rule of progression he hath 128 in the seventh;
" 1,024 in the tenth; and at the twentieth degree, or the distance of 20 genera-
" tions every man hath above a million of ancestors, as common arithmetic will
" demonstrate."—*Blackstone Com., B.* 2, *c.* 14.

It is asserted that from children apparently the most healthy, diseases the most horrible have been propagated in and by the vaccine virus. A gentleman, well known in the philanthropic world, informs me that, with lymph taken from a child supposed to be perfectly healthy, his grandchild, a healthy child, of healthy parents, was vaccinated; from this child the virus was transferred to his cousin, another healthy child, the offspring also of healthy parents. Subsequently both children became afflicted with a loathsome disease, prior to the outward manifestation of which some 20 other children were vaccinated from them.

Dr. W. F. Laurie.

Dr. Laurie, of Dunstable, who kindly allows me to mention his name, thus writes to me: "I vaccinated a child with pure lymph (reputed to be) from the " Royal Vaccine Institution. The child, though previously apparently healthy, " has ever since been nearly blind; opacities of the cornea developing them-" selves immediately after the operation. This case, and several others from " other vaccinators, at Edlesborough, where it was performed, have militated " very much against the practice of vaccination amongst the poor."

It would lengthen this Paper too much to give other similar testimonies.

Occasionally, some unreflecting person may hastily assert, without assigning any reason, that it is impossible that two poisons can be deposited together in the vaccine vesicle. Why impossible? If two distinct poisons can circulate together in the blood, why is it impossible that they should be deposited together in the same exudation therefrom? If they preserve their distinctive properties in the blood, why not in the lymph? Shall it be said that the one overcomes the other; that, for example, cow-pox masters scrofula—the cause of vaccination gains nothing by the argument, for the result must be the formation of a third something, which is neither cow-pox, nor scrofula, and which cannot be innocuous, when transmitted to the circulation of another human being.

Decomposed lymph.

Another reason why vaccination sometimes proves injurious, and even immediately fatal, is said to be the use of " decomposed " lymph. (" Lancet," 14 April 1853). But is it not possible for even the " purest " lymph to destroy health and life? It is stated amongst the arguments against small-pox inoculation, that it is frequently followed by dire sequelæ, scrofula, blindness, &c. Now, as cow-pox and small-pox are identical (according to such high authorities as Drs. Ceely, Badcock, &c.), or cognate (according to others), why should not the one be as liable as the other to the same train of consequences? May not, therefore, the evil results, often attributed to a mixed virus, be due, in reality, in many instances to the pernicious operation of the genuine vaccine lymph itself?

The cow.

By way of obviating all evil consequences, it has been proposed to take the vaccine lymph, in every instance, direct from the cow. But the constitutional disturbance would be greater, the liability to erysipelas no less, and the risk of scrofula equal; " kine, as well as swine, being subject " to that disease. It is difficult to believe that the " physical condition " of a diseased brute " is even purer than that of a human being " in the normal state. Does even a compulsory vaccinator labour under the delusion that the vaccine virus can be obtained from the cow when in a state of health? Does he hold that it is best communicated to the human being when in a state of disease? As to whether there be anything " repulsive " in transferring corruption from a diseased animal into the circulation of a healthy human being, that is quite a matter of taste.

Rash legislation.

The expectation of a contingent good cannot justify the risk of importing into a family any of those dread evils above enumerated, or reliance in the judgment of any man, much less (according to the " Lancet "), of one wholly without instruction, practical or theoretical, on the subject upon which the law empowers him peremptorily to decide?

How, then, can any justification be pleaded for forcing upon others so dangerous a gift as vaccination, and at the same time, outraging in the most grievous manner, their best affections, natural rights, reasonable convictions, and religious scruples.

When medical authors, regularly educated, make such admissions as those quoted

quoted above, is it to be wondered at that thinking men should recoil with horror from the very idea of vaccination, and conscientiously decline to jeopardize the health and lives of their offspring by the adoption of a deceitful, disgusting, and unnatural practice, a practice alike debasing to man and dishonouring to God? Is it not rather to be wondered at that any man professing Christianity should not only yield himself captive, mentally and bodily, to as mischievous a delusion as ever enthralled the human intellect, but that, failing in argument to disseminate his opinions, he should seek by force to propagate his obnoxious practice?

Apart from all considerations of the liberty of the subject, such authoritative statements should teach human lawgivers modesty, and make them shrink from legislating upon such perilously dark and ambiguous questions. Nay, to compel vaccination in the face of such statements is to incur the guilt of atrocious cruelty. Will it be said that they are undeserving of attention? They are the statements of medical men, of men much more likely to be biassed by their professional education in favour of vaccination than against it; and that is sufficient to justify the suspicions of laymen, especially corroborated, as these express testimonies are, by the oft-repeated injunction of medical writers to be careful to choose lymph from a healthy subject. But whilst the injunction confesses the danger, of what use is it as a safeguard?

Arguments for vaccination.

The arguments advanced in favour of vaccination may be thus briefly summed up:—

1. The majority believe in vaccination.

2. Sometimes, when small-pox appears in a house or a locality, vaccination checks its further spread amongst the inhabitants.

3. Some persons, who have been vaccinated, live and die without ever catching small-pox.

4. The average mortality from small-pox is less in countries where it is strictly enforced than in lands where it is optional. And,

5. Small-pox is not so rife and fatal, and there are not so many scarred visages as there used to be 50 years ago.

To these arguments it may be replied:—

Opinions of the majority.

1. That the majority believe in vaccination is a mere assumption; but even if it should be true, it would scarcely afford sufficient data upon which to decide a debateable medical question. It would scarcely do to bow down to the will of a majority as a test of truth, or to accept an opinion merely because it should chance to be popular. Had such been the received criterion of truth in the days of Jenner, we should not now be engaged in repelling the aggressions of his intolerant disciples. Who is so blind as to contend that truth shifts and changes with majorities, or that minorities have no rights and must ever be in the wrong? After all, of what weight is the testimony of the credulous believers in a nostrum? There is no mysterious specific that crowds of unthinking fanatics do not trumpet forth its miraculous powers. If it should be said that by a majority is only meant a majority of the educated classes, I must ask, of what utility is the education that fosters unreasoning credulity?

Vaccination checks small-pox.

2. That the spread of small-pox, when it makes its appearance in a house or a locality, is frequently checked by the vaccination of the healthy, seems too hasty an inference from the facts adduced in proof. The truth appears to be that the contagion is encountered and successfully resisted by the innate conservative power in the human system, before recourse is had to the presumed prophylactic. The ordinary period of incubation of small-pox is 14 days, and Dr. George Gregory (p. 66, "Eruptive Fevers") states "contagious emanations are given "off from the human body at every stage of small-pox, from the first invasion of "fever to the throwing off of the latest scabs."

There are various facts, too, which lend a colour to the belief that the merit frequently attributed to vaccination is in reality due to the innate power of the system to resist the invasion of disease.

Ida Pfeiffer was a passenger in a steamer in the East. The women and children of a harem came on board and took possession of the cabin; they brought small-pox with them; five of them died. The pestilential vapour from the cabin was horrible; but the disease did not extend beyond the harem.

Captain Carrot and his slave cargo were many weeks at sea when a case of small-pox occurred amongst the slaves. The wretch, with all the *sang froid* and good intentions of a compulsory vaccinator, perpetrates what he daintily calls a "necessary murder," and the disease did not spread.

If in these cases vaccination had been had recourse to, we should never hear an end of its praises, as the blessed means of checking the spread of small-pox. Truly, that must be a valuable prophylactic which offers a mock protection after the danger has been encountered and overcome.

Immunity from small-pox.

3. As regards the fact that many persons who have been vaccinated pass through life without being seized with small-pox, it reminds one of Bacon's whimsical defence of the use of amulets: that the happy possessor only died once, and seemed to escape often; and it may be met and balanced by another fact, that a far greater number of persons who have not been vaccinated enjoy a like immunity.

Mortality abroad.

4. Instead of drawing an inconsequent comparison between the mortality from small-pox in these kingdoms and in some down-trodden foreign states, in which, with dire consistency, vaccination has long been compulsory, it would be somewhat more to the purpose to state the respective annual average mortality, both from small-pox and from all causes, in the same foreign states, during comparative cycles of years, embracing periods when small-pox was epidemic, as well as when it was not so, both before and after the introduction of vaccination. Should we be presented with such statistics, it would be but considerate to accompany them with a caution that "paternal governments" have peculiar facilities for cooking statistics to justify anything whatsoever that may furnish an excuse to treat their subjects as children or as slaves. It would be also wise to add that, notwithstanding the paternal care of such governments, there are seasons when small-pox will obstinately assail whole districts, and spread terror and devastation around.

The Swedish Dr. Berg (as quoted in the "British Journal of Homœpathy," No. 30, from the German journal, the "Hygeia," Part 3, page 127), says, "The "small-pox epidemic, which commenced in October 1837 and ended in Septem- "ber 1838 (consequently of one year's duration), was the greatest that ever was "known;" and he adds that the per-centage of deaths in the Royal Military Hospital, amongst the small-pox patients, was $6\frac{1}{15}$. Further, it would by no means tend to hinder the drawing of just conclusions, if two important facts were considered, namely, that in these kingdoms small-pox is much propagated by the pernicious practice of inoculation; and that, in many foreign states in which vaccination is compulsory, the deaths from all causes are much in excess, in some instances double, as we shall presently see, what they are amongst ourselves.

It would likewise be helpful, in drawing comparisons between the respective mortality, from any given disease, in these kingdoms and in any foreign state, to consider the influence of climate upon health in general, and upon the manifestations of epidemic disease in particular; and this important point might be illustrated by the following apt quotation from Dr. Gregory: "There are some "countries as yet unvisited by the exanthemata. Small-pox, measles, and "scarlet fever are to this day unknown in Australia and Van Diemen's Land." And yet (can it be believed?), instead of trying to ascertain, like rational beings, the cause or causes of this happy exemption, the overbearing fanatics who practise vaccination have not only introduced it into those hitherto highly-favoured lands, but have actually succeeded in making it compulsory there!

Fifty years ago.

5. With respect to the relative number of scarred visages at the present time and at the distance of some 50 years ago, as my memory does not extend so far back, I can make no comparison; but, oddly enough, I can call to mind some instances of scarred visages, whose owners had been duly protected by vaccination. Moreover, some facts offer themselves to my judgment as accounting very satisfactorily for the decrease (if there be a decrease) in the number of "scarred visages," without compelling my recognition of the claims put forward in behalf of a disgusting nostrum.

If it can be shown that the present comparative immunity from small-pox is even mainly owing to vaccination, what need to legislate upon the subject? Do not thousands who have never been vaccinated escape the disease, without taking

any

any particular care to avoid contagion? Does vaccination protect them? Can it be even said to do so indirectly, by lessening the chances of contagion, when it is borne in mind that small-pox is always in the midst of us, and that it frequently springs up sponstaneously in a locality? Are there no persons insusceptible to small-pox contagion, as to the action of the vaccine virus? What protects them? Is no account to be taken of that *vis vitæ* which resists the invasion of disease? To what else but to this conservative power is it due that so many individuals are insusceptible of the action of the vaccine virus? Cannot this power be exalted by due care to resist small-pox, as well as depressed by repeated assaults until the system succumbs to the vaccine virus? Would not true science rather seek to strengthen than to weaken this innate power? Can it not be strengthened by good food, pure water, fresh air, temperance, cleanliness, ventilation, exercise, regular moral habits, and a cheerful well regulated mind? Dare any seriously maintain that it is best sustained in its integrity and activity by corrupting the stream of life? the pabulum and "sum of all the "organs?" Can the decrease in the ravages of small-pox be shown to have proceeded *pari passu* with the extension of vaccination? Are there no other causes to which to attribute the lesser mortality from small-pox at the present day? Has science done nothing towards bringing in a less irrational treatment than the murderous one of former days? Have sanitary regulations effected nothing towards checking every form of epidemic, or are they only powerless to restrain small-pox?

Dr. Southwood Smith.

Dr. Southwood Smith, referring to the improved condition of the inhabitants of the model dwellings, at p. 17 of his "Results of Sanitary Improvements," says: —"There has been in the improved dwellings complete exemption from typhus, "cholera, and, it may be added, small-pox; yet it must be admitted, that other "forms of zymotic disease—scarlet fever, measles, hooping cough, and diarrhœa "—have occurred, though rarely, and these maladies have in no instance "spread."

Acclimation of disease.

Do diseases never become acclimated, and thus lose much of their virulence? Dr. George Gregory states, "that epidemics are unusually severe when they "first appear in any country, or are renewed after any long interval of time;" of the operation of which law he gives the following examples:

"When cholera first invaded India, in 1817, it raged with an intensity which "may have been equalled, but has never been surpassed. When the cynanche "maligna first invaded Naples in 1618—when small-pox first appeared in "America, 1518—when the putrid sore throat first invaded America in 1735, "and London in 1747, the ravages of each disorder were terrific. It seems, then, "to be a law of the animal economy that the susceptibility to any morbid "poison is great in proportion as it has been little accustomed to the im-"pression."

Epidemic poison.

To what is it owing that the plague does not now ravage this nation as of old? Is this due to vaccination? Are not what are called epidemics only varieties of one great Proteus of Disease? Is or is not, in reality, the latent cause of epidemic disease emphatically one, now assuming this form, now that form, according to accidental circumstances, and no one knows why or wherefore? Has not this *fons malorum* its mysterious ebbs and flows? Have not the various forms which it assumes their occasional periods of appearance and disappearance for which no one can account? Had not small-pox, before the days of Jenner as well as after, its times of aggression and departure, and were they not noted by Sydenham? In the neighbourhood of Quebec small-pox has thrice raged at intervals of 100 years.—(*Lancet*, 7th April 1855.) When the mortality from small-pox is low, are not other forms of epidemic often fatally rife? How does it happen that the epidemic destroyer invades one locality or one house in one shape, and another locality or another house in another shape; nay, that on one and the same day it enters into one and the same house, and claims different victims under various forms? Are not these different victims equally exposed to the contagion of each form of disease; or rather, being exposed alike to the one unknown latent cause of disease, what influences it to assume, in each case, a different form? Is the epidemic poison one and the same, no matter what form it may assume in each individual case? If so, what becomes of the boasted protection of vaccination, unless it protect from all epidemic diseases alike? Have other forms of epidemic in a great measure superseded plague and small-

pox, and is their work of destruction now chiefly done by cholera, diarrhœa, dysentery, typhus, scarlatina, measles, influenza, and diseases of the respiratory organs? Have the varieties of this latter class of disease especially become more prevalent, virulent, and fatal; and why?

In the "Medical Times" of 1st January 1854, p. 75, we find—

Mortality at Glasgow.

"Extraordinary mortality in Glasgow in 1853: deaths, 14,312; still-born, "976. The deaths have been as 1 to 20·9. The last five years' average of "deaths in Glasgow was only 1 to 38·4.

"Under one year - - - - -	2,353
"One and under five years - - -	4,693
	7,046

"or 40·23 per cent. of the whole deaths.

	1852.	1853.	
"Small-pox - - -	584	296	decrease 288
"Measles - - - -	241	1,040	increase 799
"Hooping-cough -	639	908	„ 269
"Scarlatina - - -	481	839	„ 358

Pulmonary consumption.

"Among the diseases affecting the adult population, the tubercular will be "found, as usual, to have been the most fatal. By consumption alone there "were 2,490 persons carried off. This distemper has greatly increased during "the last 60 years. In 1775 the population of Glasgow amounted to 43,000: "the deaths by phthisis were only 161, or affecting 1 out of every 269 of the "inhabitants; whereas in 1853 there have died of consumption 1 in every "158."

The alarming increase of mortality in the above-mentioned diseases, in conjunction with the decrease in the mortality from small-pox, and, as regards the most fatal of them, contemporaneously with the introduction and spread of vaccination, together with the facts stated above by Dr. Shew on the authority of Drs. Barthez and Rilliett, may fairly prompt the inquiry how far this discovery is responsible for such results separately and combined, and suggest the apprehension that, if on the one side the good can be traced to it, the other side could show a fearful balance of evil.

Drs. Barthez and Rilliett.

Insanity.

It may be in place to notice the increase of another scourge—insanity—of which the "Illustrated London News" of 17th February 1855 says, "In the "city of London, without any increase of population, the number of lunatic "poor has doubled within the memory of some of the guardians, and the cause "has baffled their inquiries. Some are inclined to attribute this dreadful "visitation to excess of eagerness and strife in commercial pursuits, or in "mental exertions; others to diet, and some partially to the effects of railway "travelling." Why not to vaccination?

Dr. Geo. Gregory.

In the first paragraph of his work on "Eruptive Fevers," written in 1843, after "the experience which 20 years of official connexion with the Small-pox "and Vaccination Hospital had given him," Dr. George Gregory asserts "the "great principle that there are no diseases strictly isolated from others; they "are links in a chain.

"All are but parts of one stupendous whole!"

"They must be viewed in conjunction if we would hope to form just, "enlarged, and legitimate views of the character and pathological affinities of "each."

Dr. Gregory invites attention to "exanthematic or epidemic mortality" and inquires. "What is its amount? What proportion do deaths by the exanthe-"mata bear to the deaths by all other diseases? Is this proportion constant or "fluctuating? Is it alike in town and country?"

To these queries he replies as follows at pp. 5, 6, 7, and 8.

"Upon an average of years, 350,000 persons die throughout England and "Wales, and 46,000 in the metropolis. The mortality by the four great "epidemic

" epidemic maladies (small-pox, measles, scarlatina, and hooping cough) is very " nearly 40,000 in England and Wales, and about 5,000 in the metropolis, " averaging one in nine of the total mortality, or eleven per cent. This is a " very large proportion. That four diseases only should absorb one-ninth of the " total mortality of this, and probably of all other countries, may well excite our " surprise.

" If the exanthemata are considered independent of the hooping cough, con- " siderable fluctuations will be perceived, the mortality by them falling some- " times as low as six per cent., at times rising to near 13 ; but a very important " principle comes into play here, which serves to equalize the amount of epidemic " mortality. This curious doctrine had long been surmised, but was never " proved until the statistical inquiries of recent times showed its correctness. " We may for want of a better name, call it the law of vicarious mortality, by " which is understood that whenever one epidemic diminishes, another increases, " so that the sum total of epidemic mortality remains, on an average of years, " nearly the same. Vicarious mortality.

" TABLE exhibiting the Amount of Epidemic Mortality in *England* and *Wales* during the Years 1838, 1839, and 1840.

	Year 1838.	Year 1839.	Year 1840.
" Small-pox	16,268	9,131	10,434
" Measles	6,514	10,937	9,326
" Scarlet fever	5,802	10,325	19,816
" Total Mortality by the Exanthemata	28,584	30,393	39,576
" Hooping cough	9,107	8,165	6,132
" Total of Epidemic Mortality	37,691	38,558	45,708
" Total Mortality throughout England and Wales	342,529	338,979	359,561

" We learn from this table, that every year is distinguished by some master " epidemic. In 1838, small-pox was the ruling epidemic throughout England. " In 1839, measles and scarlet fever struggled for the mastery. In 1840, " scarlet fever was so general and so fatal, that the mortality by it exceeded by " one-fifth the ravages of small-pox during an epidemic season (1838), and more " than doubled the mortality by that disease in 1839.

" The following Table, exhibiting the amount of epidemic mortality in the " metropolis during a period of five years shows that the same general " principle applies to town and country, but is less manifest in the smaller " population :—

" TABLE showing the Epidemic Mortality in *London* during Five Years, 1838 to 1842.

	1838.	1839.	1840.	1841.	1842.
" Small-pox	3,817	634	1,235	1,053	360
" Measles	588	2,036	1,132	973	1,292
" Scarlet fever	1,524	2,499	1,954	663	1,224
" Total Mortality by the Exanthemata	5,929	5,169	4,321	2,689	2,876
" Hooping cough	2,083	1,161	1,069	2,278	1,603
" Total of Epidemic Mortality	8,012	6,330	5,390	4,967	4,479
" Total Mortality throughout London	52,698	45,441	46,281	45,284	45,272

"From this Table we learn that in 1838 small-pox was the great epidemic in "London, as in the country. In 1839 measles and scarlet fever were both on "the increase, while small-pox had sunk from 3,817 to 634. In 1840 scarlet "fever predominated. In 1841 hooping cough doubled its numbers and shot "above all the rest, while scarlet fever sunk to the low point which small-pox "had reached in 1839. The year 1842 has been remarkable, first, for the "extreme infrequency of small-pox, one death only throughout this great me- "tropolis being attributed to it for each day of the year; and, secondly, for the "uniform rate of mortality occasioned by its three great rivals. Everything "teaches us that when one avenue to death is closed, another opens—

"'Noctes atque dies patet atri janua Ditis.'

"You will perceive, from all this, that vaccination, great as its merits are "[What are they?—*J. G.*] (and no one more fully appreciates them than I do), "does not and cannot do all that its too sanguine admirers promised. The "blessings of vaccination are met and balanced by the law of vicarious mortality. "How and why is this? The explanation is easy. The weak plants of a nur- "sery must be weeded out. If weakly children do not fall victims to small-pox, "they live to fall into the jaws of tyrants scarcely less inexorable; scarlet fever "and measles are both advancing in respect of mortality, and the increase of "deaths by hooping cough since this century set in [that is, since the introduc- "tion of vaccination—*J. G.*] is quite extraordinary."

At page 28, Dr. Gregory further says, "It is seldom that two diseases are "epidemic at the same time in the same district: when the yellow fever raged "with such violence at Gibraltar in 1804, it was remarked that all other dis- "eases declined; and well they might, for in that fatal epidemic, out of a civil "population of 14,000 persons, 28 only escaped an attack. We may hence "learn why, during the presence of an epidemic which proves fatal at a high "per centage, the sum total of annual mortality is often not sensibly aug- "mented. The reason is obvious; other diseases fall off, and if men die of "cholera, or children of small-pox, they are not left to be the prey of pneu- "monia or of hydrocephalus, of asthma or of croup."

That after such considerations as passed through the mind of Dr. Gregory he should continue to feel any "zeal in behalf of vaccination," might well excite surprise, if he did not elsewhere (at pp. 25 and 67) intimate his conviction that the worse the general state of an individual's health, the greater his security from the invasion of "zymotic miasms," especially small-pox—a doctrine, indeed, which is the only consistent one for a vaccinator to hold.

Increased susceptibility to small-pox.

Nine years later, Dr. Gregory wrote—"Small-pox does invade the vaccinated, "and the extirpation of that dire disorder is an event as distant as when it was "first heedlessly (and in my humble judgment, most presumptuously) antici- "pated by Jenner . . . . . I am driven to the conclusion, that the susceptibility "of the variolous miasm among vaccinated persons, increases as life advances, "the reverse of what happens in the unvaccinated portion of mankind, where "the susceptibility of small-pox is greatest in infancy."—*Medical Times*, 26 June 1852.

France. Dr. Bayard.

A French author, Dr. Bayard, has just published a work "Influence de la "Vaccine sur la Population," &c., translations of a few passages of which will not be out of place here:

"Since vaccination, mortality has doubled amongst the French youth; the "military hospitals are doubly peopled; the number of marriages has augmented "in proportion double the number of marriageable females by the rapid succession "of second marriages; fertility has diminished; constitutions and the public "health have become worse; mental and bodily infirmities have increased; "existing generations have deteriorated; the proportion of adults to minors is "no longer what it was in the 18th century, consequently the tables of mor- "tality of Duvillard and Deparcieux are no longer correct; the nation by the "daily loss of its best strength, overburthened with old people and children, "beholds the public misery increasing, and hastens on rapidly to decay."—*Preface.*

MM. Herpin and Serres.

M. Herpin and others had noticed this displacement of small-pox in the age of the vaccinated, which caused M. Serres to say, "Whereas amongst the unvac- "cinated

" cinated mortality strikes the young under 10 years and afterwards declines; " amongst the vaccinated, on the contrary, it is from this age, up to 28 or 30, " that the mortality is highest" (*De la Vaccine et de la Re-vaccination*, p. 13). To recognise this displacement so clearly demonstrated by M. Serres, the Vaccine Board at London had only to open its eyes. Every year, in fact, it claims the public gratitude for its fluid-lymph, distributed so liberally to ships, garrisons, prisons, and wherever it finds a population adult, and evidently vaccinated. It had only to remember what its learned and observant compatriot Pringle wrote in 1752. " Small-pox is rare in camps and armies." To-day, on the contrary, it is frequent there; last year, according to M. Ancelon, this disease, in company with its sister typhoid-dysentery, struck the fine garrison at Luneville; both this day, in two hostile camps, decimate the armies, despite the propagation of vaccination (*Beyran Gaz. des Hopitaux*, 1^er^ *Juin* 1854.

" Thus, apart from all statistics, it is established, by the testimony of anxious " observers, that external small-pox attacks the vaccinated, and at an adult age. " M. Ancelon, struck with this displacement of small-pox in the age of the " vaccinated, in a letter to the Minister of Public Instruction, proves, from " statistics, that the vaccinated child of five years of age is more liable to small- " pox than the unvaccinated child of the same age. He concludes that the " certificate of vaccination, exacted on admission to public schools, is illusory, " and that in this respect it is better to leave to parents an entire liberty,"—pp. 10, 11.

" Every remedy for the maladies of children, writes a member of the Institute M. Villermê.
" (M. Villermê), in suppressing one cause of disease, gives more activity to " others. Vaccination only postpones death,"—p. 13.

"Vaccination was introduced at Paris in 1799, amongst its numerous rich Modification of the human constitution.
" classes. They vaccinated every one who had not previously had small-pox. " Hence it is that in 1814 there were in the metropolis so many vaccinated " individuals of from 18 to 20 years old. The year 1814 is, at Paris, exactly " the epoch of transition, At all ages up to puberty they had their preservative " —small-pox or cow-pox. It was then at the maximum, and the reaction had " not yet become evident. The deaths by external small-pox and the small-pox " convulsions of infancy having considerably diminished, this year is remarkable " for a diminution in the general mortality. But, to commence from this epoch, " we are seized with deep emotion. On one side, the invasion of small-pox on " some of the vaccinated—the charm of Jenner's inoculation broken; on the " other side, an increase of mortality amongst adolescents, in consequence of " gastro-intestinal diseases of unwonted severity. Thus, after the lapse of 12 " or 14 years, the Jennerian intoxication becomes shadowed with a funereal veil; " the seed of small-pox is not exterminated; often it has but changed its form; " mortality is only displaced; and, lastly, deadly fevers condemn without appeal " the pretensions of the Vaccine Committee of 1802. A great change has " introduced itself into our systems. This did not escape the observation of the " highest minds. 'A gradual diminution in the frequency of small-pox,' wrote " Roussillon Chamseru, 'is to be remarked from 1800 to 1811.' But, in return, " we behold intestinal affections appear. 'In Paris and its vicinity,' says Rous- " sillon Chamseru, 'from 1806, certain inflammations of the stomach, more " 'common from year to year, testify to the great change which the 'con- " 'stitution médicale' has undergone.'"—*Géographie Médicale* (Le Pileur), pp. 14, 15.

" The epidemy of Pantin, comprising fevers intermittent, remittent, con- Fever.
" tinued, putrid, and malignant, made much noise in 1810: cases, 281; deaths, " 10, three of which were reported from other causes. This is what frightened " Paris at that time. . . . On the other side, in time of peace, under a better " regime, with hygiene better understood, and a staff of enlightened physicians, " in the Military Hospital at Lyons, one soldier in three, according to M. de " Castelnau, is struck with typhus fever. This passes unnoticed; it is not " called an epidemy; it is the ordinary state—the rule! In the last century, " epidemics of putrid malignant fever were rare, and seldom observed; they " were only to be met at distant intervals in the great centres of population and " amidst masses of human beings. Immediately after the introduction of vacci- " nation, these epidemics were still unfrequent; nevertheless a change in the " constitution began to show itself, and, as the vaccinated attained to adult age,

"the maladies of the digestive organs became aggravated, and a 'constitution "'médicale' new and universal began to predominate, notwithstanding the "great progress of hygiene both public and private, of agriculture, and of "the ease arising from thence to the rural populations. . . . . Briefly fra- "ming an accusation against vaccination, I say that it has deprived small-pox "of its ordinary form in depriving it of its cutaneous eruption. But, deprived "or not of this leading symptom, the variolous gastro-enterite of the vaccinated "is most irequently postponed in life,"—pp. 17, 18.

Cholera.

"Typhus fevers have not become more frequent, but more deadly; a morbid "element left intact in the system is become complicated with mucous, bilious, "and putrid fevers and dysenteries, and imparts to them a character of un- "wonted severity. It is the same with cholera. . . . . Since vaccination, "not only has cholera become much more frequent and dangerous, but previously "it was not contagious; and now it is impossible not to recognise in it this "symptom amongst the vaccinated. Further, its progress has altered, and like "all contagious diseases, raging more violently from 1st of April to 1st No- "vember in the damp and humid season, it is become that described by Boërhâave "and Stoll; '*Verno tempore primo incipiens, æstate crescens, languens autemno,* "'*hyeme sequenti ferè cadens.*' A progress which was that of small-pox,"—p. 20.

"The typhus of armies and prison is epidemic. It is propagated in the one "locality; but if the sick be removed to a healthy locality they do not spread "their disease, because it is not contagious. Small-pox and measles, on the "contrary, carry the *pustulous enteritis* wherever the sick may go, from the hut "to the palace. They are contagious and inevitable, although sporadic. It is "thus that contagion differs from the epidemy of the air or the water. More- "over, epidemics are liable to complications with contagious maladies." . . . "Dry cholera, without diarrhœa, is become more frequent in summer by the "epidemic and contagious element that vaccination has left intact in the human "system,"—p. 23.

M. Duché.

"It is asserted that this discovery is a progress in medicine. Hear M. Duché: "'There is not one of the great principles of the healing art which harmonises "'with this practice—the offspring of empiricism—or which can be answerable "'for its errors and its condemnation. It may disappear at once, without "'destroying anything with it; it may fall as a pernicious parasite, too long "'attached to the great tree of medical science.' (*Gaz. des Hôp.* 28 Mai 1853.) "Once for all, let us do justice to this other error, that the diminution of small- "pox is accompanied with a diminution of infirmities. I will not repeat, after "M. Ancelon, that in the train of typhus fever may be noticed deaf and dumb- "ness, loss of voice, chronic gastritis, deteriorated constitutions, and crowded "lunatic asylums. I will produce the official returns.

French army.

"In the seven classes, from 1834 to 1837, there are 459,000 exempt, owing "to infirmity, and 504,000 admitted fit for service.

"In the seven classes, from 1839 to 1845, 491,000 are exempt; only 486,000 "are declared fit for service.

"Thus, in the first period, amongst 100 conscripts, 45·5 are infirm or dwarfs; "in the second, 50 are in this sad condition. It would seem that after so many "exemptions, at least the young soldiers of our army would be strong and fit "for service. Well, according to the Report of 5 April 1849, presented to the "National Assembly by General de Lamoriciere, in the name of the commission "for organising the public force, there is a mean loss on every 100 men.

"Having	1	year's	service	-	-	7·50
,,	2	,,	,,	-	-	6·50
,,	3	,,	,,	-	-	5·50
,,	4	,,	,,	-	-	4·50
,,	5	,,	,,	-	-	3·

Randot de l'Yonne.

"After the sixth year, there is a loss of 20·0, which continues throughout "the following years. Such is the condition of the French youth—its strength "diminished, and its health deteriorated. By the condition of the French "youth of 21 years of age, thus authenticated, a correct judgment may be "formed of the state of weakness of a great part of the French population, and "the

" the progress of decay.—(*Randot de l'Yonne, de la Decadence de la France*, p. 24.

" M. de Watteville, inspector-general of charitable institutions, in a report to M. de Watteville.
" the Minister of the Interior, after stating the mortality is nearly the same in
" 1847 and 1780, notwithstanding the great ameliorations of every kind intro-
" duced in the regime and management of charitable institutions, adds: ' The
" ' number of military in our hospitals surpasses all experience. In 1847, the
" ' army did not reckon in France more than 300,000 men. The military hos-
" ' pitals treated in the course of this year 63,000 invalids; the civil, 87,500;
" ' which gives a total of 150,500 soldiers in hospital, or one in two. This
" ' seems nearly impossible for men in the prime of life.' "—pp. 26, 27.

At p. 28, Dr. Bayard quotes M. Carnot, an eminent actuary:—" The babe M. Carnot.
" just born had, in the 18th century, a probability of living 16 years; in
" the 19th century, 26 years. On the other hand, in the last century, the young
" man of 20 years had a probability of adding 37 years to his life; to-day the
" young man of the same age can only hope for 26: the budget of death has not
" diminished, it is filled with the corpses of the youth of from 18 to 30 years
" old.

" M. Le Docteur Noirot, after stating the general increase in the duration of Dr. Noirot.
" middle life in the half century, adds: ' Notwithstanding that the mortality of
" ' all ages has successively diminished, that of the period from 10 to 30 years
" ' has considerably increased. A disturbing cause has therefore appeared in
" ' our day, not only to arrest during that period of life the progressive decrease
" ' of mortality, but even to give it an impulse in the opposite direction.' This
" disturbing cause [M. Noirot names it elsewhere] is vaccination.—(*Etudes
" *Statistique sur la Mortalite.*)" p. 29.

" ' Death, in forms unknown in the 18th century, levies to-day on youth the
" ' tribute formerly imposed on infancy by small-pox.'—(*Carnot Essai sur la
" *Mortalite.*)" p. 45.

" Before 1789, the mortality was 1 in 30 in the military hospitals; after the
" great war, from 1st January 1816 to 1st January 1821, it was also 1 in 30 at
" Val-de-Grâce. These are positive facts. Now what is not less so, is, that
" from 1st January 1838 to 1st January 1848 it was 1 in 15 at the military
" hospital of Gros-Caillou, Paris: that is, double. Why is this? If reforms
" are numerous, the soldiers better treated, the military physicians more able
" than before, which no one disputes, why is it that the soldier born in 1817 is
" more liable to death than he who was born in 1795, all other things being
" equal?" p. 50.

" On the 25th September 1849, in the Academy, one of its most learned mem- M. Castel.
" bers, in an address which remains without reply, the Honourable M. Castel,
" attributed the recent outbreak of cholera to a humoral infection resulting Cholera.
" from the want of purification of the system, in consequence of small-pox being
" suppressed by the action of vaccination; and he continued: ' How much this
" ' practice (on which we had built the most flattering hopes) has left of taint
" ' in the animal juices, has caused of dissolution in the elements of life, is
" ' manifest—so great is the temerity to oppose an obstacle to an eruptive
" ' malady, so difficult is it to supply the place of nature.' The opinion of
" M. Castel, who saw in small-pox, if one may say so, an original taint, and in
" its manifestation a necessary cleansing of the system—an opinion also that of
" M. Villermé—which has been consecrated by time, and openly professed by
" Buchan, Dupuytren, and all informed pysicians, finds, especially in the masses,
" an echo the most powerful; their hostility to vaccination is most instructive.
" From its introduction to this day they repel it passively and openly. To pro- Popular opposi-
" pagate it, to make it common, it was necessary to organize vaccination com- tion.
" mittees, and to pay the vaccinators and the vaccinated; in the country the
" doctor must take it to the house. Persuasion often fails, then comes the
" menace, ' Your children shall not enter the school unless they be vaccinated.'
" That was not enough at Paris. A mayor of the capital proclaimed that ' the
" ' indigent who refuse to vaccinate their children shall be deprived of relief.'
" In spite of the requirements of colleges, the threat of deprivation and official
" reports, each year signalizes the indifference of the people, some of whom even
" repulse it! Small-pox still has its victims; the last yearly report counts 364

" at Paris in 1854. The vaccination commissions pass from zeal to wrath, " without any regard to the duration of life in those who have had small-pox, " which testifies to a grave phenomenon supervening on the progress of this " disease; they demand a law which shall impose by force their favourite prac- " tice. ' *Compelle intrare*,' cries M. Aran, in the " Union Médicale" (June " 1853). The Academy approves a report, in which it is said that ' the people " ' not being enlightened as to their true interests (which is not the affair of " ' a moment), there must be a law to compel parents to vaccinate their " ' children. It would be to assail personal liberty, it is said; sigular assault, " ' that in waiting for light, we should not fear to use force.' "—(*Rapport*, 1853, p. 8).

" What, more than half a century has not sufficed for you to make light! " What can you reply to those who say, that in your darkness, in place of " salutary medicaments, your hands have only dispensed poisons to the people?

M. Ancelon. " M. Ancelon, who sees and judges for himself, for whom experience is not a " sealed book, after having largely sketched the sufferings of the present genera- " tion, and shown to us its rapid progress towards decay, cries out. ' One is " ' moved at the thought of a vaccine constitution;' ' vaccination is an error " ' which has had its turn,' says M. le Proffesseur Trosseau. ' Government,' " according to M. le Proffesseur Chrestien, of Montpellier, ' will perhaps be " ' obliged to repel it with as much energy as they have propagated it,' " pp. 59, 60, 61.

Germany. At pp. 64, 65, Dr. Bayard quotes M. Ancelon:—" The German populations, " astonished at having to confide in the assertions of a few vulgar milkers, have " never yielded with a good grace to the interested zeal of the vaccinators; the " medical police, armed in this country with all the rigour of a Draconian law, " could never make them comprehend that inoculation with the product of the " morbid secretions of cattle should be without danger, when the same police " forbids them, under pain of hideous and mortal diseases, to use the flesh of these " same contaminated animals. They have instinctively divined, even before " M. le Docteur Brissot (1815), before M.M. Teuffer and Berlan, before the " publication of those satires, the orders for re-vaccination in the Prussian " army, that cow-pox has its errors, weakness, and eccentricities, and that far " from causing variolous epidemics to recoil a hair's breadth, it only facilitates " their development. This sentiment of popular hostility partaken successively " by a considerable number of learned physicians in different states of Germany,

Dr. Schreiber. " found, on the borders of the Rhine, a worthy interpreter in Dr. E. Schreiber, " who wrote an eloquent argument against vaccination in 1832. In his opinion, " ' the vaccine juggleries have been accepted too carelessly and without exami- " ' nation.' But it is especially since 1849, since the memorable labours of M. " Carnot, that public opinion, long asleep, has taken a form in consequence of " the discussions sustained by Drs. Linguerle, of Wangen; Schauffele, of Olnin- " gen; Zeller, of Kochendorf; Retter, of Rottenbourg; Dün, Heinerdinger; " Nettinger, of Stuttgart; in medical assemblies, official and otherwise; in " political journals, in scientific and various kinds of works. A list of all those " writings would be too long; here are the titles of a few: *La Vaccine est un* " *abus* (Jan Ritter 1851); *L'Empoisonnement avec cet épigraphe*; *Scientiam* " *profanasti, populum occidisti, terram perdidisti.* (Par Nittinger, 1852.) *Cin-* " *quante ans d'empoisonnement du peuple Wurtembergeois avec l'épigraphe: quod* " *odi hoc facio.* In fine, this last winter, the ' Gazette Universelle,' of Augs- " burg, the ' Moniteur' of Germany, published a series of articles, of which the " conclusion is that they have had too much of vaccination. The adversaries of " vaccination have on their side good faith, knowledge, and experience to back " them; the impatience of Rhenish Bavaria, Westphalia, Wurtemburg, and, if " we may believe the vaccinator (authority little to be suspected here) Dr. Heser, " of Greifswald, the anger deeply founded in Swabia; against them, only the " stipendiaries, to whom they indignantly replied, as in France, that for them " the cow-pox was a pretty milch cow."

Dr. Bayard quotes M. Carnot.

M. Carnot. " ' From 1800 to 1845, in less than half a century, mortality has doubled in " ' the population between the ages of 20 and 30,' " p. 73.

" ' In

" ' In 24 years, from 1818 to 1842, the proportion of deaths to the sick has " doubled amongst the French youth, between the ages of 20 and 30,' " p. 75.

" ' The doubling of the mortality of the young since 1800 acknowledges, for " ' its immediate principal cause, gastro-intestinal diseases,' " p. 77.

" ' The acute continued fevers, called typhoid, terminate fatally much more " ' often amongst the vaccinated than the unvaccinated,' " p. 78.

" ' Gastro-intestinal diseases have acquired excessive gravity since the adop- " ' tion of vaccination,' " p. 80.

At p. 89, Dr. Bayard quotes Dr. Serres:

" ' Since 1825, small-pox has become mortal amongst the vaccinated. At the Hospital of Pity. " ' Hospital of Pity, in 1825, of 162 vaccinated attacked by this epidemic, 25 " ' fell. (*Dr. Serres*, 3^e *Memoire*, § 17.)' "

Upon this Dr. Bayard observes:—

" The proportion 25/162 is that of the ordinary mortality from small-pox " amongst the unvaccinated. There is then no modification.

" The natural progress of small-pox is reversed by vaccination. The exception " is become the rule, and the rule the exception; thus—

" 1stly. Natural small-pox attacks infants; adults seldom. It is the contrary " amongst the vaccinated.

" 2dly. Natural small-pox is more frequently external than internal. It is " the contrary amongst the vaccinated."—p. 89.

Thus throughout the civilized world resounds the mournful impeachment of vaccination, as the only cause to which, in diverse climes, and under varied conditions, can be imputed a host of rapidly accumulating evils which afflict the human race, and cast a deepening gloom over its future prospects.

In short, vaccination is not an antidote to anything but health and good manners. It is confessed that it does not diminish the sum total of human mortality, and that it adds to the sum of human suffering. What is it, then, but a great sham, a wicked delusion, which could have emanated only from the " father of lies," and to advocate which is at best but to preach, " Let us do evil " that good may come?"

What would be thought of the tinker who should knock a hole in the bottom of his saucepan lest one should be burned therein in the ordinary way? and yet this is just what the vaccinator does; and when he finds, as he might have foreseen if he had been governed by common sense, that his saucepan does not wear a bit the better, but rather the worse, he gravely endeavours to excuse the failure by asserting that unfortunately he made the hole too big or too little, too much on this side or on that, or by offering some other equally wise excuse.

The propositions advanced by the Epidemiological Society (at page 5 of their Report to the Lords), in support of compulsory vaccination, are capable, for the most part, of a direct negative. It is not true that " small-pox is a disease to " which every person is liable who is not protected by a previous attack or by " vaccination"; many persons are manifestly insusceptible of small-pox. It is not true that " every case of it is a centre of contagion, and every unvaccinated " or imperfectly vaccinated population is a nidus for the disease to settle in and " propagate itself;" single cases of small-pox occur in " unvaccinated or imper- " fectly vaccinated " populations, and the disease does not spread. It is not true " that vaccination is a perfectly safe and efficient prophylactic against this " disease;" cases of small-pox and of death from small-pox are constantly occurring amongst the vaccinated, and cases of death from vaccination itself are frequent. Epidemiological Society.

The following tables, compiled from figures paraded in that report, contrast the mortality from all causes in different parts of Great Britain and Ireland, vaccination being voluntary, with the mortality from all causes in different parts of the Austrian empire, vaccination being compulsory, and assuredly lend no countenance to either compulsion or vaccination.

MORTALITY from all causes in various parts of *Great Britain* and *Ireland*.

TOWN OR DISTRICT.	Year.	Population.	Deaths from all Causes.	Deaths per Thousand.
London - - - - -	1851 -	2,373,799	55,354	23·3
England and Wales - - -	„ -	17,922,768	395,933	22·0
Liverpool - - - - -	1850 -	258,236	7,500	29·0
Manchester - - - -	„ -	228,433	6,680	29·0
Birmingham - - - -	„ -	173,951	4,056	23·3
Leeds - - - - -	„ -	101,343	2,502	24·6
Dublin - - - - -	1851 -	258,361	6,931	26·8
Cork - - - - - -	„ -	85,745	2,002	23·3
Galway - - - - -	„ -	34,057	789	23·0
Limerick - - - - -	„ -	53,448	1,418	26·5

It is worthy of notice, that the rate of mortality in these towns is highest in two English towns, and lowest in an Irish town.

MORTALITY from all causes in various parts of the *Austrian* Empire.

TOWN OR DISTRICT.	Year.	Population.	Deaths from all Causes.	Deaths per Thousand.
Lower Austria - - - -	1850 -	1,538,047	54,970	35·7
Upper Austria - - - -	„ -	852,323	23,646	27·7
Styria - - - - -	„ -	1,006,971	30,534	30·3
Illyria - - - - -	„ -	783,180	34,630	44·2
Trieste - - - - -	„ -	82,597	3,283	39·7
Tyrol - - - - -	„ -	859,706	25,276	28·2
Bohemia - - - - -	„ -	4,409,900	170,432	38·6
Moravia - - - - -	„ -	1,799,838	55,637	30·9
Silesia - - - - -	„ -	438,586	12,123	27·4
Gallicia - - - - -	„ -	4,555,477	140,329	30·8
Bukowina - - - - -	„ -	380,826	11,070	29·0
Dalmatia - - - - -	„ -	393,715	9,442	23·9
Lombardy - - - - -	„ -	2,725,740	92,550	33·9
Venice - - - - -	„ -	2,281,732	76,150	33·3
Military frontier without the seven burghs.	„ -	1,009,109	44,610	44·2

How the once extravagant pretensions of vaccination have dwindled down! And this is the thing in favour of which we are required to surrender our liberties! Alas, for medical science; how pitiful it looks as it beseeches the secular power to sustain it!

It seems to require no small degree of modest assurance on the part of benevolent gentlemen, whose amiable ambition it is to undertake the regulation of our nurseries, and to relieve parents of the burden of responsibility, to persuade us that we have neither the right nor the capability to act for our families in important domestic concerns; and that, on public grounds, we should resign some of our most sacred duties into the hands of volunteers. Such hardihood is much as if some eccentric burglar were to assure us that he had a moral right to dispose of our worldly goods, under the plea that the disposition he contemplated was essential to the "welfare of others."

Compulsory vaccination.

But, assuming that vaccination is entitled to all the credit claimed for it, let us endeavour to estimate the gain to the nation if it should be generally enforced. The yearly average of deaths from all causes in England and Wales is about 370,000, of which about 7,000 are from small-pox.

This, then, is the limit of gain which enforced vaccination could confer; but from this should be deducted about one-third for the deaths from small-pox amongst the vaccinated; and from the remainder should be deducted an equivalent to the deaths caused immediately and remotely by vaccination, and another equivalent for the deaths resulting from the law of "vicarious mortality."

It

It would then require no little ingenuity to discover a balance in favour of vaccination.

Medical theories.

If men would but cast away their superstitions and intelligently examine this question, they could scarcely fail to perceive that a belief in vaccination is at variance with the theories of all the "pathies" and "isms;" that it conflicts alike with the *contraria contrariis* of the allopath, and the *similia similibus* of the homœopath, it being neither contrary nor similar, but "the same." The consistent disciple of Priessnitz (who taught the purification and strengthening of the system by water and hygienic means), the follower of Thomson (who rejected all but simple remedies capable of assimilation), the pupil of Graham (who would not permit the introduction of even healthy animal matter into the human system), the hygeist, and the believer in the antiseptic theory, must alike reject the medical use of this diseased and poisonous animal product. Even the isopath cannot justify its employment, inasmuch as it is introduced into the healthy, not into the diseased body, and is exhibited, not as a remedy, but as a disease; not as a cure, but as a charm. Every thinking mind should reject the irrational doctrine that to disseminate disease is to propagate health, and must condemn the equally irrational practice of giving everybody a malady, because somebody may possibly catch it. When men shall venture to think for themselves, vaccination cannot fail to be rapidly numbered with other obsolete medical superstitions and quackeries.

General remarks.

The Compulsory Vaccination Act is said to be for the protection of the public. What public? Surely they who reject vaccination do not ask for this enforced protection; they want information, and they are insulted with a coercion Act. Cannot they who believe in vaccination protect themselves? Nobody seeks to hinder them; nobody presumes to dispute their right to adopt any medical practice, however questionable it may be. Why cannot they act with like forbearance to others? When will men learn to do as they would be done by? When will they exhibit becoming modesty as regards their own convictions, and forbearance towards even the follies of their fellows? When will it be universally understood and acknowledged that all men have rights, to rob them of which is also to deprive them of the sense of responsibility, and to paralyse the spirit of self-reliance? Surely if freedom be more than a name, it implies the right of the freeman to reject not only that which other men may choose to regard as an evil, but even that which they may combine to urge upon him as a good. When will men cease to be selfish, and to prefer self-interest to principle? How would any noble lord or honourable gentleman like to have this or that peculiar medical practice forced upon himself? What right has he to force his favourite prophylactic upon any one else? Why should I accept his decision in a matter which chiefly concerns myself? What qualifications does he possess, that I should bow to him as an authority in medical matters? What right has any individual whatever to inflict his medical creed or practice upon another? Could there be a greater outrage? Could there be a more dangerous precedent? The day may come when they who violate the sanctity of private and individual right may invoke it in vain, and bitterly bewail the legitimate consequences of their short-sighted legislation! But why do the advocates of vaccination really seek to force the practice upon others? Let them pretend as they may, that they are moved by feelings of kindness towards and a desire to benefit those whom they would coerce, their real motive is as patent as it is futile and selfish. Knowing that their prophylactic affords but a doubtful protection, they hope, by extending this same doubtful protection to others, to obtain, indirectly, additional security, by lessening the chance of contagion. But what principle of equity requires that one person should be compelled to incur an immediate risk in order that another person may derive from thence a chance of protection from a remote danger? How ridiculous to offer a protection which cannot protect even from one of the most prevalent and prolific causes of disease—fear!

Short-sighted policy.

How absurd that a man should attempt to visit with punishment the want of belief in a scientific (or rather unscientific) dogma, when and because he cannot prove it to be true, and that he should pretend to the possession of a prophylactic of such potency, that he is impelled by philanthropic motives to proffer it to the acceptance of all; and yet, if it be not immediately accepted, should threaten force, under the plea of self-preservation, when, if he speak the truth, it is so

easy for him to protect himself, and at the same time to give evidence of his honesty by directly applying the nostrum to his own person? Compulsory vaccinators prove, at least, this much, that they are so smitten with a dread of small-pox as to exhibit their distrust of their prophylactic by their anxiety to coerce others.

Small-pox sporadic.

Who can hope to banish small-pox and the risk of contagion from the world by vaccination? From whence did small-pox first spring? Is it not frequently sporadic? Writing of the small-pox epidemic of 1839, the Registrar-general thus expresses himself:—"Will the simple principle of contagion explain the "rapid propagation of the epidemic? Not exclusively; for the disease is always "contagious, and a certain number of deaths are caused by it at all seasons and "in every county of England. The facilities of intercourse, and the frequency "of contact with the sick, are not greater when the disease is increasing or at "its height than when it is stationary or declining."

The Registrar-general draws attention to the fact, that the average weekly mortality from small-pox in the metropolis is five, and moots the question, which is left unanswered, "why do the five deaths become 10, 15, 20, 31, 58, 88, "weekly; and then progressively fall through the same measured steps?" It may not be out of place to suggest another question: Why does the mortality at all decline, whilst there is left untouched in the metropolis one person who is "unprotected" by vaccination.

Insusceptibility to vaccination.

But to resume; there are many persons avowedly insusceptible of vaccination. The annual report, for 1854, of the National Vaccine Board records the entire failure on a grand scale, at Loanda, of vaccination, "white, negro, and mulatto" having all alike, without a single exception, exhibited insusceptiblity to the action of the vaccine virus, which the Board is disposed to attribute to some peculiarity in the climate. There are many others whom vaccination fails to protect. There are still others who are liable to repeated attacks of small-pox. Who then, I repeat, can hope to banish from the world small-pox, and the risk of contagion therefrom, through the instrumentality of vaccination? Have they succeeded in banishing it from other countries by enforcing vaccination? By no means.

Sweden.

Hear Dr. Brady's confession as regards Sweden:—"Whether or not "the Act, as a compulsory measure, be in accordance with the spirit of the "British constitution, I will not discuss; but the very able and excellent 'report "'on the state of small-pox and vaccination in England and Wales, and other "'countries, of the Vaccination Committee of the Epidemiological Society' clearly "shows, that in those countries, such as Sweden and Denmark, where vaccination "is compulsory, the per centage of deaths from small-pox is much higher than "in those countries, such as France and Belgium, where honorary distinctions "and rewards are held out to medical men as inducements to exertion in "furthering the object of vaccination; and this important fact I strenuously "brought before the House, and endeavoured to point out the inference that it "would be found impossible to fully carry out the provisions of this Act, how-"ever desirable general vaccination might be considered, unless the operatives "were treated with some degree of courtesy, and were somewhat better "remunerated than a cab-driver."

I venture to draw a different inference to that deduced by Dr. Brady, I venture to infer that the voluntary principle is every way the best.

Religious aspect of the question.

On the first introduction of vaccination, the wags jocularly asserted that it would change the vaccinated into horned cattle. A truth is often concealed beneath a jest. This much is apparent, no man with the slightest pretension to refinement or gentlemanly feeling, not to mention that divine courtesy which distinguishes the true Christian, and influences him to do as he would be done by, could think of forcing his way, in person or by proxy, into his neighbour's dwelling, to commit violence upon, and to communicate disease to the persons of its inmates. Thousands object to vaccination on religious grounds; are they to be dragooned out of their objections. Religious liberty means something more than the establishment of what we hold to be truth; it implies even the tolerance of what we may condemn and pity as error, and in that consists its essence. Surely in a nation professing to be foremost in its attachment to the cause of civil and religious freedom, and the most tender and consistent in respecting the rights of conscience and private judgment, and to regard aggressions on either, in foreign lands, with a holy indignation, it will be sufficient

to

to draw attention to the fact, that, as one of the local registrars expresses it, "parents frequently refuse to have their children vaccinated, as they say they "will suffer the Lord to work his will, and that vaccination is bringing sickness "upon their children." Religious objections.

That such objections are not confined to the lower classes, we have the admission of the "Lancet."

"There is one [objection] which assuredly would not yield to the Bill in "question [The Compulsory Vaccination Bill]. We refer to the so-termed "religious objections to vaccination, which we happen to know are not confined "to the poor and ignorant, having met with them in quarters where very "different views might have been expected. They are of two kinds. Some are "of opinion that we have no right to expose ourselves to the evils and dangers "resulting from vaccination, in order to prevent a future, probably a distant, "and certainly a fortuitous evil. Others object on the broad ground, that "we should leave to Providence to determine the nature of our corporeal "afflictions."

The "Lancet" has "no sympathy with this morbid morality;" possibly not. Let us accept the evidence, not the spirit, of the writer. But surely this same "morbid morality" will not be without much sympathy, especially if it be subject to persecution, unless the universal profession of devotion to the principles of religious liberty is only so much cant and hypocrisy.

How much it were to be wished that on a question like this, certain religious professors and spiritual pastors, instead of bullying their neighbours into compliance with their crude belief in an obscure point in medical practice, would imitate the Christian humility of the excellent Rev. John Newton, as evidenced Rev. John Newton. in his letter on inoculation to the Rev. Mr. R——, in his "Cardiphonia;" he says:—"I am not a professed advocate for inoculation; but if a person who "fears the Lord should tell me, 'I think I can do it in faith, looking upon it as "'a salutary expedient which he in his providence has discovered, and which "'therefore appears my duty to have recourse to, so that my mind does not "'hesitate with respect to the lawfulness, nor am I anxious about the event, "'being satisfied that, whether I live or die, I am in that path in which I can "'cheerfully expect his blessing,' I do not know that I could offer a word by "way of dissuasion.

"If another person should say, 'My times are in the Lord's hands; I am "'now in health, and am not willing to bring upon myself a disorder the con-"'sequences of which I cannot possibly foresee: if I am to have the small-pox, "'I believe He is the best judge of the season and manner in which I shall "'be visited, so as may be most for his glory and my own good; and, therefore, "'I choose to wait his appointment, and not to rush upon even the possibility of "'danger without a call. If the very hairs of my head are numbered, I have no "'reason to fear that, supposing I receive the small-pox in a natural way, I "'shall have a single pimple more than He sees expedient; and why should I "'wish to have one less? Nay, admitting, which however is not always the "'case, that inoculation might exempt me from some pain and inconvenience, "'and lessen the apparent danger, might it not likewise, upon that very account, "'prevent my receiving some of those sweet consolations, which I humbly hope "'my gracious Lord would afford me, if it were His pleasure to call me to a "'sharp trial. Perhaps the chief design of this trying hour, if it comes, may "'be to show me more of His wisdom, power, and love, than I have ever yet "'experienced. If I could devise a mean to avoid the trouble, I know not how "'great a loser I may be in point of grace and comfort. Nor am I afraid of "'my face; it is now as the Lord has made it, and it will be so after the small-"'pox. If it pleases Him, I hope it will please me. In short, though I do not "'censure others, yet, as to myself, inoculation is what I dare not venture upon. "'If I did venture, and the issue should not be favourable, I should blame my-"'self for having attempted to take the management out of the Lord's hand "'into my own, which I never yet did in other matters without finding I am "'no more able than I am worthy to choose for myself. Besides, at the best, "'inoculation would only secure me from one of the innumerable natural evils "'the flesh is heir to; I should still be as liable as I am at present to a putrid "'fever, a billious cholic, an inflammation in the bowels or in the brain, and a "'thousand formidable diseases which are hovering round me, and only wait "'His permission to cut me off in a few days or hours; and therefore I am

" determined, by His grace, to resign myself to His disposal. Let me fall into " the hands of the Lord (for His mercies are great) and not into the hands of " men.'

" If a person should talk to me in this strain, most certainly I could not say, " 'Notwithstanding all this, your safest way is to be inoculated.'

" We preach and hear, and I hope we know something of faith, as enabling us " to intrust the Lord with our souls. I wish we had all more faith to intrust him " with our bodies, our health, our provision and our temporal comforts likewise. " The former should seem to require the strongest faith of the two. How strange " is it that when we think we can do the greater, we should be so awkward " and unskilful when we aim at the less! Give my love to your friend; I dare " not advise, but if she can quietly return at the usual time, and neither run inten- " tionally into the way of the small-pox, nor run out of the way, but leave it " simply with the Lord, I shall not blame her. And if you will mind your " praying and preaching, and believe that the Lord can take care of her without " any of your contrivances, I shall not blame you; nay, I shall praise him for " you both."

That eminent Christian, the Rev. John Newton, dared not even to advise, where some meek and humble pastors of the present day do not hesitate to coerce; thus—

" Fools rush in where Angels fear to tread."

If ever it be expedient to observe the Divine injunction, " Take no thought " for the morrow," it is with reference to this question. For my part I freely confess to some reliance upon nature, nature's laws, and nature's God. I believe that temperance, cleanliness, exercise, cheerfulness, and courage are the best prophylactics; and I see in the facts we have been considering sufficient reason to exclaim with Newton, " Let me fall into the hands of the Lord, and not of " men!"

Surely to maintain that the creature, whom an all-good, all-wise, all-powerful Being formed in His own image, is so ill adapted to fulfil the conditions of existence, that the performance of a filthy operation, of which he is allowed to remain in ignorance for tens of centuries, is essential to his wellbeing, is to imitate the logic of that audacious blasphemer who wished that he had been present at the creation to have saved the Creator from the commission of so many blunders. The laws of God are fixed; in them there is ever visible a design, and a means adapted to the end. Doubtless if it were His will that corruption should be infused into the human circulation, He would have gifted His creature with the needful instinct, and the corresponding organ. Food is taken into the stomach through the mouth, air into the lungs through the nostrils, but there is no orifice prepared by Divine wisdom for the insertion of the vaccine virus. The new-born babe breathes and sucks instinctively, in obedience to natural laws, without any knowledge of them. The vaccine virus, the baneful discovery of man's perverted reason, is introduced into the system in defiance of natural laws, and every such violation brings its punishment.

Political aspect.

After all, is physical force the rule of right? *magna est veritas* but a figure of speech? and the assertion that an Englishman's home is his castle, a mockery?

Are we going backwards or forwards? In 1813 Lord Borringdon proposed to render vaccination compulsory; so soon after its discovery did the idea of coercion occur to the human mind: but even in those days of Toryism our rulers would not consent to violate so outrageously the liberty of the subject; wherefore is it that it is less tenderly cared for now?

What fatuity seized the minds of our panic-stricken rulers to impel them to commit such an outrage upon our liberties? What nightmare, the offspring of small-pox and the medical profession, stupified the people while their rights were being voted away? Are men who are held incompetent to be trusted with the care of their own persons, or of those of their children, competent to be trusted with a share in the Government of the body politic and of the complicated affairs of a mighty empire?

Once begun, where is such legislation to end? Is every presumed good thing in medical practice to be forced upon us? If one thing, why not another? Are we to be leeched, bled, blistered, burned, douched, frozen, pilled, potioned, lotioned, salivated, not only *secundum artem*, but by Act of Parliament? The glorious uncertainty of law wedded to the inglorious uncertainty of physic!

What

What an union! Shall we be compelled to adopt that famous scientific remedy for enlargement of the heart, which cures the disease and kills the patient? or the wonderful remedies of any eminent specialist?—that is, when the learned gentleman shall have finally made up his mind what those shall be? It has been gravely proposed to inoculate with scarlatina as a protection from this disease, and also with the virus of the most loathsome of all diseases as a protection likewise from it: shall we have forced upon us these blessings, too, by Act of Parliament? Imagine Parliament the arena for discussing the merits of the conflicting doctrines and practices of the medical schools and sects! If you would have some idea of the scenes likely to ensue, attend any one of the great gatherings of the medical profession. But are our legislators the best authorities to decide upon points of medical practice? How have they become qualified if, as the Vaccination Act must presume, laymen generally be incompetent? Will medical men admit that any assemblage of laymen is competent to decide a medical question? Not they. What then? is Parliament merely to register the edicts of the medical profession? that is, whenever the gentlemen of that profession can manage to arrive at an agreement amongst themselves? What a position that would be for the Parliament of Great Britain to occupy! If governed thus, what decision would it have come to upon this very question of vaccination when Jenner first propounded his discovery?

Ethically, it may be very true that "the best-known remedies must be used "until better ones can be discovered," but, considering the increasing number of conflicting medical schools and authorities, the constant fluctuation of medical doctrines, and the various antagonistic remedies zealously proposed for any one given disease (small-pox itself, for example), it can scarcely be hoped that a Parliamentary pharmacopœia could give much satisfaction, or that Parliament could be prevailed upon to undertake one; and then, what would be thought of a Parliamentary dietary?

Enforced drainage.

To attempt to place in the same category the infliction of compulsory vaccination and the enforced drainage of a house, is a glaring absurdity. The two cases have not one point in common, but many points of strongly marked dissidence. The enforced drainage of an undrained house deals with a present and palpable evil—an undeniable reservoir of filth and source of offensive effluvia, disease, and death, and the evil is effectually corrected. The compulsory vaccinator has not the excuse of dealing with a present and palpable evil, but takes alarm at "a future, probably a distant, and certainly a fortuitous evil," an evil of which he dares not assert that it will ever arise, even should the precaution upon which he insists be neglected; an evil of which he dare not assert that it will never arise, even should his vaunted precaution be adopted. Moreover, the compulsory vaccinator, contemptuously trampling upon the rights of private judgment, outraging conscientious convictions, and violating the sanctity of the person, rudely tampers with the secret springs of life in a being "fearfully and "wonderfully made," and violently exposes that being to dire dangers, the very dangers against which he pretends to be anxious to guard him—disease and death. The drain removes filth from the habitation of the body, the compulsory vaccinator conveys filth into the dwelling of the soul.

If it be too much for a British freeman to claim to be the owner of his own body and the conservator of his own health, to have his house held sacred from the forcible intrusion of insolent quacks, and his family protected from the violent infliction of disgusting diseases—patriotism is but an empty sound, principle an unmeaning word, "civil and religious liberty" a cuckoo cry, public religious observances a solemn mockery, and England no longer a land worth loving or living in.

Violation of the constitution.

Has England become an Austrian province; or have our rulers imported an Austrian police?

Our streets are daringly placarded, and our churches desecrated with insulting revolutionary notices headed "Compulsory Vaccination."

Will Englishmen tamely allow themselves to be thus bullied by the tools of a medical faction? Or can it be that an Englishman's appreciation and love of freedom are limited to the exercise of a noisy but empty privilege; the roaring out of drunken and lying songs, ending with "Britons never shall be slaves."

The enemies of freedom are cunning, active, and watchful. Bit by bit they

eagerly strive to steal away those liberties which as yet they dare not attempt to ravish openly and at once.

Englishmen were wont to boast that their constitution assured the inviolability of the person: that security no longer exists; the constitution is daily violated in the persons of the most innocent.

English justice used to demand proof of an overt act, as essential to the commission of a crime; the dangerous—the fatal principle has been imported into English legislation, that the penalties of the law may fall where no overt act is committed, and a novel doctrine of passive criminal aggression is propounded, as justifying active aggression on our liberties.

Blackstone.

"The first and primary end of human laws," says Blackstone, "is to maintain "and regulate those absolute rights of individuals.

"Besides those limbs and members that may be necessary to a man in order "to defend himself or annoy his enemy, the rest of his person or body is also "entitled, by the same natural right, to security from the corporal insults of "menaces, assaults, beating, and wounding, though such insults amount not to "destruction of life or member."—*Commentaries*, book i. chap. i.

"To make a complete crime cognizable by human laws, there must be both "a will and an act. . . . . In all temporal jurisdictions an overt act, "or some open evidence of an intended crime, is necessary, in order to de-"monstrate the depravity of the will, before the man is liable to punishment; "and as a vicious will without a vicious act is no civil crime, so, on the other "hand, an unwarrantable act without a vicious will is no crime at all. So that "to constitute a crime against human laws, there must be, first, a vicious will, "and, secondly, an unlawful act consequent upon such vicious will."—*Ibid*, book iv. chap. ii.

Strange, that the first sacrifice of British freedom should be offered up at the shrine of quackery!

Evil results.

Surely a wise Government may perceive that there are greater evils than the occasional outbreak of an epidemic. The systematic violation of human rights and natural affections, the uprooting from the human breast of feelings of self-reliance, a state religion in physic—coercion which may well be regarded as odious persecution—the poor believing that what they hold dearest is sacrificed to the selfish prejudices of the rich—any one of these is far worse than a pestilence. To do violence to conscientious convictions is ever productive of disaster. It is unwise to treat the masses as children. It is perilous to legislate too much for a people; over-legislation is the chief curse of despotic countries, and such it threatens also to become in free countries. While men suffer under oppression, and before they become enervated by luxury, so long does the love of liberty glow purely in their breasts; but when they have obtained all that they can reasonably desire, and have no grievance of which to complain, then with the natural petulance of prosperity, and the restlessness inherent in human nature, they affright themselves with imaginary ills, until in the very wantonness of freedom, as an escape from the wearisome burden of thought, and the toilsome cares of independence, they hasten to seek a refuge in the apathy of voluntary slavery, and forge to themselves fetters more galling than any which their forefathers ever rent asunder.

Taxation.

It should not be forgotten that the Compulsory Vaccination Act levies a tax upon every English babe for the benefit of the medical profession, and causes much expenditure of public money.

Popular opposition. Registrar-general's Returns.

On the whole, it need excite no surprise that many local registrars should report this measure as a "nullity," owing to the resistance of the people; that the Act is "very unpopular," and the labouring classes are "very violent" when "served with notices" (Ipswich); that parents are "prejudiced" against vaccination (Henley); that the Act is a "total failure" (Mitford); that the lower orders are "prejudiced" (Wells); that it is "utterly impossible to work "the Act" (St. Giles); that "many parents have a great dislike to vaccina-"tion" (Espingham); that "there is an aversion to the Act, and people en-"deavour to avoid having their children registered to prevent their receiving "the notice requiring vaccination, and this is common to other districts" (Mitford), &c. &c. &c.

Will

Will it be easier to enforce this odious statute when the law of settlement is abolished, unless the passport system be introduced? If the avowed object were to bring all legislation into contempt, could a measure more ingeniously adapted to the desired end be devised?

Medical journals.

The "Medical Circular" condemns compulsion as "tyrannical;" and adds, "How it could be expected that any Act of Parliament so obviously repugnant "to the feelings and habits of Englishmen could meet with success, surpasses "our powers of imagination to conceive."

The "Lancet" says:—"It is in consequence of the universal prevalence of "this feeling [the dread of other diseases being propagated by vaccination] that "the compulsory clauses of the Act are doubly and justly obnoxious."

The organs of medical dissent, the "Journal of Health," "Scottish Herald of "Health," "Botanic Record," "Botanic Journal," "Hygeist," all denounce compulsion, and most of them vaccination.

Private letters.

Private letters, breathing indignation and defiance of the Act, have reached me from more than thirty individuals of respectability; some of them of high station. A few extracts will illustrate the feelings of the writers:

A very learned and religious man, a Conservative, and ex-professor of English literature at one of our universities, thus writes:

"The attack upon the liberty of private action is in my eyes to the utmost "degree at once impertinent and atrocious; I cannot imagine two (honest) "opinions upon the subject. To let a medical man come with a warrant of "inoculation into your nursery, to forbid my asking a sensible druggist what "salve I shall put on my chapped hands—[in reference to another proposed "enactment. *J. G.*]—is giving up the name of an Englishman."

An eminent London solicitor thus writes: "It seems incredible that such an "Act as that, rendering vaccination compulsory, should have received the sanction "of the three Estates; I am no great believer in vaccination myself, having been "attacked with small-pox notwithstanding the supposed antidote had been duly "poked into my arm when a child, and though I might have submitted to the "remedial (?) process with reference to my baby, had the Act not passed, now "that no option is left me on the subject, my repugnance to the operation is very "much increased. I do not know to what purpose the fines, when levied, are to "be applied; but the erection of a monument to medical intolerance would be "an appropriate method of disposing of them."

A lady says: "In different families, who, from great fear of infection, have "had their children vaccinated many times, I perceive the colour of the skin is "so altered from its natural hue, that as they grow up they have youth without "bloom, and very feeble health. This Act of Parliament is an Act of com-"pulsory cruelty, disease, and death."

Another lady thus writes: "Has any man the right to enter my house, and, "uncovering my shoulder, insert the point of his lancet beneath my cuticle, that "lancet being soiled with the scum of the fermenting blood of even the loveliest "infant in the world? If no man dare act so as regards myself, how dare any "man assume to act so as regards my helpless infant?

Indian custom.

"We occasionally see fear overwhelm the human intellect in a pitiable degree. "I recollect in Bengal, a few years ago, the natives of a certain town were panic-"stricken on discovering the leaves of some mango trees in the neighbourhood "all covered with excrescences, in size resembling the pustules of small-pox; "they immediately spread an alarm, and the wisest amongst their leaders declared "that the trees would infect the whole district, and depopulate the country, "unless proper precautions were adopted to check the spread of the disease. "Accordingly the credulous assembled round the tree in which the Shitann, who "propagates small-pox, was supposed to have located, and with tomtoms and "horns raised such a discordant din about his ears that he was glad to escape to "some other place where the people were less wise and prudent. This was the "'precaution' of heathens. At least it has the merit of being harmless, and to "a thinking mind is not one whit more absurd than compulsory vaccination.

"The Compulsory Vaccination Act is an Act against which every mother in "the kingdom ought to raise her voice. Men will doubtless cry out, and with

"truth, that women ought not to interfere in politics, but when men throw "down the gauntlet by interfering in the nursery, they must only blame them- "selves for the turn affairs may take."

A respectable London tradesman writes—"My wife and I are determined that "no child of ours should be vaccinated."

A gentleman, writing from a manufacturing town, says,—"There are many "here determined to resist."

A northern magistrate, the head of an extensive manufactory, and a large and influential family, says,—"We are all opposed to compulsion."

An eminent author characterises the Compulsory Vaccination Act as,—"The "commencement of an aggression which threatens to become more systematic, "and to deprive us of some of our most sacred rights. . . . . When "I read," he adds, "that vaccination in England is compulsory, I felt an indig- "nation that I should fail to express against such a monstrous interference with "the right of a parent."

A "District Vaccinator" writes,—"I am certain that this odious, this most "cruel and wicked law, cannot long remain in force: it is worthy only of the "Emperor of All the Russias, or the King of Dahomey."

Similar sentiments have also been frequently expressed to me, *vivâ voce*, by persons of various ranks.

Royal Jennerian Vaccine Institution.

The Royal Jennerian Vaccine Institution condemns all legislative interference with the cause of vaccination, as injurious to it. Indeed, such interference can have but one of two results: if it be submitted to, it must lower the standard of independence, and degrade the national character; if it be repelled, it must foster a spirit of bitter hostility against the State.

Accordingly, while in some districts the people slavishly bow to the yoke, in other districts they threaten violence; and who can affect surprise? Resistance is the natural reply of the free to aggression; and how could the upholders of physical-force science hope that it should prove an exception to the rule? Even if vaccination were a good, the loss of liberty would be too heavy a price to pay for it. Without liberty, all other blessings are of no value. The man who can think otherwise deserves to be a slave. As it is, the chief consequence of compulsory legislation has been to provoke inquiry and resistance, and to bring vaccination into great abhorrence.

A "Public Vaccinator" complains ("Lancet," 16 June 1855), that since the Act rendering vaccination compulsory, the "prejudice" against the operation has increased.

The argument, "If you won't, I'll make you!" may be very imposing on the lips of a public school monitor to his fag, or of a slaveholder to his slave, but there are tens of thousands of independent inquiring minds which will not be thus answered, and will not accept the knock-down argument of an Act of Parliament in lieu of facts.

What a time at which to tamper with the constitutional rights of the people! Accustomed, as the partisans of legalised quackery are to commit blunders, they never committed a greater than when they resolved to force their nostrum upon those who have seriously determined not to have it.

Mr. Herbert Spencer.

In 1851 Mr. Herbert Spencer wrote, "The measures enjoined by the Vaccina- "tion Act of 1840 were to have exterminated small-pox; yet the Registrar-gene- "ral's reports show that the deaths from small-pox have been increasing"—(*Social Statics*, p. 387). In the debate (18 July 1854), in the Commons, on the Vaccination Act Amendment Bill, Dr. Brady "urged that the small-pox was more pre- "valent than usual this year, and that arose from the Act of last Session absolutely "operating to prevent medical men from vaccinating with the necessary facility" —(*Medical Circular*, 26 July 1854). It is difficult to believe that vaccination is less practised now than before the passing of the Act of 1853; but, whatever be the cause, the fact that small-pox is becoming more prevalent is worth noting, and the obvious deduction is, that Parliament is powerless to dispense health. Any man, not a lunatic nor an idiot, is the best, and should be the sole guardian of his own health.

Deficient in modesty, logic, and common sense, is it strange that compulsory vaccinators should find their arrogance repulsed, their claims to infallibility derided, their treacherous nostrum rejected, and their attempt to arbitrate on questions "social, political, and theological," laughed to scorn.

If

If this wicked legislation, involving such sinful violation of natural rights, the fundamental principles of the constitution, and the plainest precepts of the Gospel, be persisted in, we may expect that the memory of Jenner will become more odious than ever it has been honoured.

Concluding remarks.

If it can be proved that vaccination is a blessing worthy of universal acceptance, let it be done. As a parent, I for one shall greatly rejoice; and, doubtless, amongst those who now oppose it, will arise some of its most zealous and active advocates; but, in any event, let us have no un-English and un-Christian legislation. Let us leave compulsion to countries like Austria, where the number of hens a man may keep in his yard, or the number of bakers or butchers in a town, are alike regulated by law, and where the subject may be forcibly seized by the police, and carried off and vaccinated; or, like Sweden, where prayers out of church, or out of canonical hours, are illegal; and where children are forcibly torn from their nurses' or parents' arms, and triumphantly borne away to church and baptized.

Compulsion does not suit England. Filth is the hot-bed in which small-pox thrives, and from whence it oft-times springs spontaneously; and it is to comprehensive sanitary measures that a wise government must look for the eradication of this as of other epidemics.

If Jenner were living now, I believe that he, who himself suffered prosecution, would be the first to raise his voice against compulsory vaccination. Be that as it may, let us remember that we do not derive our liberties from the sufferance of our rulers, and that our rights are unalienable, and cannot be confiscated by any earthly power. We had ancestors who so loved liberty that they would not surrender it for any material interests whatever; from the moment that we begin to weigh the one against the other, and to falter in our choice, future historians will date the commencement of the decadence of public spirit and national greatness.

Let us jealously guard our hard-won, precious rights, and not surrender even that one which, in the immensity of our riches, may appear of but trivial value.

We must keep our medical liberties intact. We must preserve them all, or lose them all; and with them must be lost, or preserved, no small portion of our civil and religious liberties as well; they are all intimately and inseparably united. May no unhallowed tongue beguile us; may no unhallowed hand despoil us!

Junius.

"Let me" says Junius "exhort and conjure you never to suffer an invasion "of your political constitution, however minute the instance may appear, to pass "by without a determined, persevering resistance: one precedent creates another. "They soon accumulate and constitute law; what yesterday was fact, to-day "is doctrine.

"Examples are supposed to justify the most dangerous measures; and where "they do not suit exactly, the defect is supplied by analogy."

I have, &c.
(signed) *John Gibbs.*

The French Academy.

P. S.—The question of the desirableness of vaccination is now for discussion before the first medical school in Europe—the French Academy of Medicine. This bare fact sufficiently condemns the policy of compulsion.

Dr. Farr.

I am told that, in a recent Blue Book, it is stated, on the authority of Dr. Farr, that "there is a constant tendency in the general mortality of the "country to an increase." This in spite of all the vaunted discoveries of modern medicine, and all the improvements in sanitary science! What is the counteracting cause? Can it be other than vaccination? When will men of science cease to experiment on the human body, and learn to respect the laws of nature?

J. G.

COMPULSORY VACCINATION.

COPY of a LETTER, dated 30 June 1855, addressed to the President of the Board of Health, by *John Gibbs*, Esquire, entitled "Compulsory Vaccination, briefly considered in its Scientific, Religious, and Political Aspects."

(*Mr. Brotherton.*)

Ordered, by The House of Commons, *to be Printed*,
31 *March* 1856.

Under 8 *oz.*

VACCINATION.

RETURN to an Address of the Honourable The House of Commons, dated 13 March 1856;—*for*,

"RETURN of the SUMS voted for the NATIONAL VACCINE INSTITUTION since 1833, and the Appropriation, in detail, of such Sums."

RETURN of the SUMS voted for the NATIONAL VACCINE ESTABLISHMENT since 1833; and the Appropriation, in detail, of such Sums.

1833–34.

		ACCEPTA.	£.	s.	d.
1833:		Balance of last account	718	6	6
November	30	Annual Grant from Parliament £.2,200 – –			
		Deduct Stamp for Receipt 2 2 6	2,197	17	6
		£.	2,916	4	–
		EXPENSA.			
September	30	J. P. Vincent, Esq., President of College of Surgeons	100	–	–
		Sir H. Halford, Bart., President of College of Physicians	100	–	–
		Dr. Hume, Censor	100	–	–
		Stamps for receipts	–	7	6
October	4	Miss Grant, half-year's rent to Michaelmas	65	–	–
		Dr. Turner, Treasurer	25	–	–
December		Water-rate to Midsummer	1	17	6
		Church-rate	2	8	4
		Paving-rate	4	17	6
		Poor's-rate	11	18	4
		Assessed taxes to Michaelmas	15	4	10
		J. Utton, Messenger, 18 weeks' wages	18	–	–
1834:		Disbursements by the Director	5	2	10
January	13	Dr. Hue, half a year's salary to Christmas	100	–	–
		J. T. Simpson, Esq. ditto	100	–	–
		J. C. Carpue, Esq. ditto	75	–	–
		J. A. Gillham, Esq. ditto	75	–	–
		J. R. Aikin, Esq. ditto	50	–	–
		E. Leese, Esq. ditto	50	–	–
		F. Ager, Esq. ditto	25	–	–
		J. Barnett, Esq. ditto	25	–	–
		J. Harkness, Esq. ditto	25	–	–
		W. J. Lewis, Esq. ditto	30	–	–
		R. H. Robertson, Esq. ditto	25	–	–
		R. Semple, Esq. ditto	25	–	–
		S. H. Sterry, Esq. ditto	25	–	–
		N. Ward, Esq. ditto	25	–	–
		Charles Murray, Esq. ditto	25	–	–
		Brettell, printer	15	10	–
		Mitchell, glassman	6	–	–
		New, stationer	3	4	6
		Thompson, cutler	30	2	2
		Fenning, coal merchant	9	12	–
March		Miss Grant, half-year's rent to Lady-day	65	–	–
		Stamps for receipts	1	–	–
		Water-rate, to Christmas last	1	17	6
		Paving and cleansing-rate to Christmas last	4	1	3
		Poor's-rate, to 27 January	9	5	2
		Assessed taxes to Lady-day	15	4	10
		J. Utton, 27 weeks' wages	27	–	–
		Disbursements by Director	13	–	6
July	1	Dr. Hue, Registrar, half-year's salary	100	–	–
		J. T. Simpson, Esq., Director, ditto	100	–	–
		J. C. Carpue, Esq. ditto	75	–	–
		J. A. Gillham, Esq. ditto	75	–	–
		C. R. Aikin, Esq. ditto	50	–	–
		E. Leese, Esq. ditto	50	–	–
		F. Ager, Esq. ditto	25	–	–

(*continued*)

		1833-34—Expensa—*continued.*	£.	s.	d.
1834:					
July	1	J. Barnett, Esq., half-year's salary	25	–	–
		J. Harkness, Esq. - ditto	25	–	–
		W. J. Lewis, Esq. - ditto	30	–	–
		R. H. Robertson, Esq. ditto	25	–	–
		R. Semple, Esq. - - ditto	25	–	–
		S. H. Sterry, Esq. - ditto	25	–	–
		N. B. Ward, Esq. - ditto	25	–	–
		C. Murray, Esq. - - ditto	25	–	–
		Brettell, printer	17	17	6
		Cranwell, glazier	5	13	6
		Fenning, coal merchant	9	12	–
		Mitchell, glassman	4	–	–
		New, stationer	5	15	9
		Thompson, cutler	30	2	–
		J. Utton, Messenger, four weeks' wages	4	–	–
		Disbursements by the Director	2	17	4
		Stamps for receipts	1	2	6
		G. T. Guthrie, Esq., President of College of Surgeons	100	–	–
		Balance	724	13	8
		£.	2,916	4	–

Audit, 21st July 1834.

The Balance of this Account is Seven hundred and Twenty-four pounds Thirteen shillings and Eight-pence.

John Bright.

1834–35.

		ACCEPTA.	£.	s.	d.
1834:		Balance of last account	724	13	8
		Annual Grant from Parliament £. 1,823 – –			
		Deduct Stamp for Receipt 1 11 –			
			1,821	9	–
		£.	2,546	2	8
		EXPENSA.			
September	30	Sir H. Halford, Bart., President of College of Physicians	100	–	–
		Dr. Bright	100	–	–
		Dr. Turner, Treasurer	25	–	–
November	11	Stamps for receipts	–	5	–
		Miss Grant, half-year's rent to Michaelmas	57	10	–
December	1	Mr. Murray, bill for law charges	44	–	–
1835:					
February	11	Dr. Hue, half a year's salary to Christmas	100	–	–
		J. T. Simpson, Esq. - - ditto	100	–	–
		J. A. Gillham, Esq. - - ditto	75	–	–
		J. C. Carpue, Esq. - - ditto	50	–	–
		C. R. Aikin, Esq. - - ditto	37	10	–
		E. Leese, Esq. - - - ditto	37	10	–
		F. Ager, Esq. - - - ditto	25	–	–
		J. Harkness, Esq. - - ditto	25	–	–
		W. J. Lewis, Esq. - - ditto	30	–	–
		R. H. Robertson, Esq. - ditto	25	–	–
		R. Semple, Esq. - - - ditto	25	–	–
		S. H. Sterry, Esq. - - ditto	25	–	–
		N. B. Ward, Esq. - - ditto	25	–	–
		Brettell, printer	17	8	–
		Cranwell, glazier	1	–	–
		Fenning, coal merchant	9	12	–
		Mitchell, glassman	4	–	–
		New, stationer	8	10	3
		Thompson, cutler	35	3	10
		Stamps, for receipts	–	17	–
		William Utton, 33 weeks' wages	33	–	–
		Water-rate, one year, to Christmas last	3	15	–
		Assessed Taxes, to Michaelmas	6	–	5
		Parish rates, to August last	7	–	10
		Church-rate	2	3	4
		Disbursements by the Director	14	12	4
April	25	Miss Grant, half a year's rent	57	10	–

1835:	1834-35—Expensa—*continued.*	£.	s.	d.
July - - 6	Dr. Hue, half a year's salary to Midsummer - - -	100	–	–
	J. T. Simpson, Esq. - - ditto - - - - -	100	–	–
	J. A. Gillham, Esq. - - ditto - - - - -	75	–	–
	J. C. Carpue, Esq. - - ditto - - - - -	50	–	–
	C. R. Aikin, Esq. - - - ditto - - - - -	37	10	–
	E. Leese, Esq. - - - - ditto - - - - -	37	10	–
	F. Ager, Esq. - - - - ditto - - - - -	25	–	–
	J. Harkness, Esq. - - - ditto - - - - -	25	–	–
	W. J. Lewis, Esq. - - - ditto - - - - -	30	–	–
	R. H. Robertson, Esq. - ditto - - - - -	25	–	–
	R. Semple, Esq. - - - ditto - - - - -	25	–	–
	S. H. Sterry, Esq. - - - ditto - - - - -	25	–	–
	N. B. Ward, Esq. - - - ditto - - - - -	25	–	–
	J. Utton, nineteen weeks' wages - - - - -	19	–	–
	Disbursements by the Inspector - - - - -	8	2	1
	Poor's-rate - - - - - - - - -	6	11	–
	Paving and lighting to June 1834 - - - - -	3	16	8
	- - Ditto - - to Christmas last - - - -	3	7	1
	Sewer's-rate - - - - - - - - -	3	5	–
	Assessed Taxes to April last - - - - - -	6	–	5
	Brettell, printer - - - - - - - -	18	12	6
	Mitchell, glassman - - - - - - - -	4	–	–
	New, stationer - - - - - - - -	6	1	6
	Thompson, cutler - - - - - - - -	36	2	–
	A. White, Esq., President of College of Surgeons - -	100	–	–
	Mansfield, builder - - - - - - - -	20	2	–
	Stamps for receipts - - - - - - - -	–	19	6
	Fenning, coal merchant - - - - - - -	10	10	–
	Balance - - -	612	4	11
	£.	2,546	2	8

Audit, 6 July 1835.

The Balance of this Account is Six hundred and Twelve pounds Four shillings and Eleven-pence.

Henry Halford, President of the Royal College of Physicians.
Anthony White, President of the Royal College of Surgeons.
H. S. Cholmeley, Senior Censor of the Royal College of Physicians.
Thomas Turner, Treasurer.

1835-36.

1835:	ACCEPTA.	£.	s.	d.
	Balance of last Account - - - - - - - -	612	4	11
December - 4	Annual Grant from Parliament - - £. 1,850 – –			
	Deduct Stamp for Receipt - - – 10 –			
		1,849	10	–
	£.	2,461	14	11

	EXPENSA.			
September - 30	Sir H. Halford, Bart., President of the Royal College of Physicians - - - - - - - - -	100	–	–
	Dr. Cholmeley, Senior Censor - - - - - -	100	–	–
	Stamps for receipts - - - - - - - - -	–	5	–
October - -	Miss Grant, half-year's rent - - - - - -	57	10	–
December - 28	Dr. Hue - - - half-year's salary - - - -	100	–	–
	J. T. Simpson, Esq. - - ditto - - - - -	100	–	–
	J. A. Gillham, Esq. - - ditto - - - - -	75	–	–
	J. C. Carpue, Esq. - - ditto - - - - -	50	–	–
	C. R. Aikin, Esq. - - - ditto - - - - -	37	10	–
	E. Leese, Esq. - - - - ditto - - - - -	37	10	–
	F. Ager, Esq. - - - - ditto - - - - -	25	–	–
	A. Buchanan, Esq. - - ditto - - - - -	25	–	–
	W. J. Lewis, Esq. - - ditto - - - - -	30	–	–
	R. H. Robertson, Esq. - ditto - - - - -	25	–	–
	R. Semple, Esq. - - - ditto - - - - -	25	–	–
	S. H. Sterry, Esq. - - ditto - - - - -	25	–	–
	N. B. Ward, Esq. - - ditto - - - - -	25	–	–
	Brettell, printer - - - - - - - -	12	–	–
	Cranwell, glazier - - - - - - - -	3	5	9
	Fenning, coal merchant - - - - - - -	9	18	–
	New, stationer - - - - - - - -	7	10	6
	Thompson, cutler - - - - - - - -	30	3	4

1835-36—EXPENSA—*continued.*

1835:		£.	s.	d.
December - 28	Gill, dyer	4	15	6
	Birch, carpenter	1	14	8
	Presley, upholder	1	19	4
	J. Utton, messenger, 26 weeks' wages	26	–	–
	Poor's-rate to Michaelmas last	6	10	–
	Water-rate to Midsummer	1	17	6
	Disbursements by Inspector	14	15	–
1836:	Stamps for receipts	–	17	–
April - 22	Miss Grant, half a year's rent to Lady-day	57	10	–
June - 25	Sir H. Halford, Bart., President	75	–	–
	Dr. Ager, Senior Censor of College of Physicians	75	–	–
July - 2	J. Utton, 26 weeks' wages to the 2d of July	26	–	–
	Church-rate to 11th June 1835	2	3	4
	Paving-rate, a year to 25th December	6	4	7
	Assessed Taxes, a year to Lady-day last	12	–	10
	Water-rate to Christmas last	1	17	6
	Bill for boxes	1	7	6
	Disbursements by the Director	11	14	5
	Poor-rate to Lady-day last	6	11	–
	Dr. Hue, half a year's salary as Registrar	100	–	–
	J. A. Gillham, Esq., half-year's salary	75	–	–
	J. C. Carpue, Esq. - - ditto	50	–	–
	C. R. Aikin, Esq. - - ditto	37	10	–
	E. Leese, Esq. - - - ditto	37	10	–
	F. Ager, Esq. - - - ditto	25	–	–
	A. Buchanan, Esq. - - ditto	25	–	–
	W. J. Lewis, Esq. - - ditto	30	–	–
	R. H. Robertson, Esq. - ditto	25	–	–
	R. Semple, Esq. - - ditto	25	–	–
	S. H. Sterry, Esq. - - ditto	25	–	–
	N. B. Ward, Esq. - - ditto	25	–	–
	Brettell, printer	20	3	–
	Will. Fenning, coal merchant	10	10	–
	Mitchell, glassman	8	–	–
	New, stationer	2	15	9
	Cranwell, glazier	–	18	6
	Thompson, cutler	40	1	6
	J. G. Andrews, Esq., President, College of Surgeons	100	–	–
	Stamps for receipts	1	–	–
		1,897	19	6
	Balance	563	15	5
	£.	2,461	14	11

AUDIT, 18 July 1836.

The Balance of this Account is Five hundred and sixty-three pounds fifteen shillings and five-pence.

Astley Cooper.
John Ayrton Paris.

1836-37.

1836:	ACCEPTA.	£.	s.	d.
July - -	Balance of last Account	563	15	5
November - -	Annual Grant from Parliament - £. 1,850 – –			
	Deduct Stamp for Receipt – 10 –			
		1,849	10	–
	£.	2,413	5	5

EXPENSA.

July - - 27	Executrix of late J. T. Simpson, Esq., half a year's salary to Midsummer	100	–	–
	Salary for woman who kept the house while under repairs	7	12	–
	Stamp for receipt	–	2	6
August - 16	J. Hunter, Esq., Inspector, salary from 6th July to the 31st, inclusive	13	13	11
October - 20	Miss Grant, half a year's rent	57	10	–
November - 8	Executrix of late J. T. Simpson, Esq., amount of salary from June 24th to July 6th	6	11	6
	Water-rate to Midsummer	1	17	6
	Disbursements by Mr. Hunter, Inspector	1	9	1
	Disbursements by Mr. Gillham, Inspector	6	13	10
	J. Utton, 26 weeks' wages	20	–	–

1836–37.—EXPENSA—*continued.*

1836:			£.	s.	d.
November	28	J. A. Gillham, Esq., salary from 1st August to Christmas	79	14	7
„	31	J. Utton, six weeks' wages to this day	6	–	–
1837:					
January		Weaver, coal merchant	1	10	–
		Parish rates to Michaelmas	6	10	–
		Assessed taxes to ditto	6	–	5
		Disbursements by the Inspector	9	10	8
		Dr. Hue, half a year's salary to Christmas	100	–	–
		C. Carpue, Esq. ditto	50	–	–
		C. R. Aikin, Esq. ditto	37	10	–
		E. Leese, Esq. ditto	37	10	–
		F. Ager, Esq. ditto	25	–	–
		A. Buchanan, Esq. ditto	25	–	–
		W. J. Lewis, Esq. ditto	30	–	–
		R. H. Robertson, Esq. ditto	25	–	–
		R. Semple, Esq. ditto	25	–	–
		S. H. Sterry, Esq. ditto	25	–	–
		N. B. Ward, Esq. ditto	25	–	–
		Brettell, printer	9	12	6
		Fenning, coal merchant	11	2	–
		Mansfield, for repairs of house	174	–	–
		Mitchell, glassman	6	5	3
		Thompson, cutler	40	4	8
		New, stationer	6	2	–
		Gritten, for repairing glass-frames, &c.	7	10	6
		Simmonds, carpenter	5	8	6
		J. A. Gillham, Esq., salary, as Vaccinator, from 24th June to 1st August 1836	15	3	8
		Stamps for receipts	–	16	–
February		Paving-rate, a year to Christmas	4	6	3
		J. Utton, six weeks' wages	6	–	–
		Disbursements by the Inspector	2	2	9
		J. Tomkins, Esq., salary, as Vaccinator, from 1st August to Christmas last, and stamp	19	19	6
March	25	J. Utton, six weeks' wages	6	–	–
		Poor-rate to Lady-day	5	19	4
		Water-rate to Christmas last	1	17	6
		Disbursements by the Inspector	4	2	2
		J. A. Gillham, Esq., a quarter's salary	62	10	–
April	7	Miss Grant, half-year's rent to Lady-day	57	10	–
		Church-rate	2	3	4
May	6	William Utton, six weeks' wages	6	–	–
		Disbursements by the Inspector	2	15	9
June	25	Sir H. Halford, Bart., President	100	–	–
		Dr. Paris, Senior Censor	100	–	–
July		Sir Astley Cooper, Bart., President, College of Surgeons	100	–	–
		Dr. Hue, Registrar, a half-year's salary	100	–	–
		J. A. Gillham, Esq., a quarter's salary	62	10	–
		J. C. Carpue, Esq., half-year's salary	50	–	–
		C. R. Aikin, Esq. ditto	37	10	–
		E. Leese, Esq. ditto	37	10	–
		W. J. Lewis, Esq. ditto	30	–	–
		F. Ager, Esq. ditto	25	–	–
		A. Buchanan, Esq. ditto	25	–	–
		R. H. Robertson, Esq. ditto	25	–	–
		R. Semple, Esq. ditto	25	–	–
		S. H. Sterry, Esq. ditto	25	–	–
		J. Tomkins, Esq. ditto	25	–	–
		N. B. Ward, Esq. ditto	25	–	–
		Brettell, printer	12	17	6
		Fenning, coal merchant	10	10	–
		Mitchell, glassman	6	12	6
		New, stationer	18	13	6
		Thompson, cutler	35	6	6
		Disbursements by the Inspector	4	14	6
		J. Utton, nine weeks' wages	9	–	–
		Stamps for receipts	1	5	6
		Balance	334	7	9
		£.	2,413	5	5

AUDIT, 17 July 1837.

The Balance of this Account is Three hundred and Thirty-four pounds Seven shillings and Nine-pence.

Henry Halford, President of the Board.
Edw. Thos. Monro.

1837–38.

		ACCEPTA.	£.	s.	d.
1837:		Balance of last Account		334	7	9
		Annual Grant from Parliament £.1,850 – –			
		Deduct Stamp for Receipt – 10 –			
			1,849	10	–
		£.	2,183	17	9
		EXPENSA.			
August	–	Assessed taxes to Lady-day last	6	–	5
		Water-rate	1	17	6
		J. Utton, four weeks' wages	4	–	–
		Disbursements by Inspector	3	13	6
October	13	Miss Grant, half-year's rent	57	10	–
„	24	J. Utton, ten weeks' wages	10	–	–
		Assessed taxes to Michaelmas	6	–	5
		Poor-rate	5	19	2
		Paving-rate	2	2	10
		J. A. Gillham, Inspector, a quarter's salary	62	10	–
		Ditto, his disbursements	5	6	9
December	18	Ditto, his disbursements	3	13	2
		J. Utton, eight weeks' wages	8	–	–
1838:					
January	8	Dr. Hue, Registrar, half a year's salary	100	–	–
		J. A. Gillham, Inspector, quarter's salary	62	10	–
		J. C. Carpue, Esq., half-year's salary	50	–	–
		C. R. Aikin, Esq. ditto	37	10	–
		E. Leese, Esq. ditto	37	10	–
		W. J. Lewis, Esq. ditto	30	–	–
		F. Ager, Esq. ditto	25	–	–
		A. Buchanan, Esq. ditto	25	–	–
		R. H. Robertson, Esq. ditto	25	–	–
		R. Semple, Esq. ditto	25	–	–
		S. H. Sterry, Esq. ditto	25	–	–
		J. Tomkins, Esq. ditto	25	–	–
		N. B. Ward, Esq. ditto	25	–	–
		Brettell, printer	26	15	–
		Fenning, coal merchant	10	4	–
		Mitchell, glassman	8	12	11
		New, stationer	7	6	2
		Thompson, cutler	55	10	9
		Stamps for receipts	–	17	–
February	8	Water-rate to Christmas last	1	17	6
		J. Utton, eight weeks' wages	8	–	–
		Disbursements by the Inspector	9	3	1
March	27	J. Utton, seven weeks' wages	7	–	–
		Disbursements by the Inspector	3	10	4
		J. A. Gillham, Esq., Inspector, a quarter's salary	62	10	–
April	15	Miss Grant, half a year's rent to Lady-day	57	10	–
		Assessed taxes to Lady-day	6	–	5
		Poor-rate to Lady-day	6	4	4
		Paving and cleansing rate to Christmas	1	13	1
May	11	J. Utton, six weeks' wages	6	–	–
		Disbursements by Inspector	4	3	7
June	25	Sir H. Halford, Bart., President, Royal College of Physicians	100	–	–
		Dr. Monro, Senior Censor, Royal College of Physicians	100	–	–
July	2	J. Utton, seven weeks' wages	7	–	–
		Disbursements by the Inspector	3	6	4
„	16	Sir A. Carlisle, President of College of Surgeons	100	–	–
		Dr. Hue, Registrar, half-year's salary	100	–	–
		J. A. Gillham, Esq., a quarter's salary	62	10	–
		J. C. Carpue, Esq. half-year's salary	50	–	–
		C. R. Aikin, Esq. ditto	37	10	–
		E. Leese, Esq. ditto	37	10	–
		W. J. Lewis, Esq. ditto	30	–	–
		F. Ager, Esq. ditto	25	–	–
		A. Buchanan, Esq. ditto	25	–	–
		R. H. Robertson, Esq. ditto	25	–	–
		R. Semple, Esq. ditto	25	–	–
		S. H. Sterry, Esq. ditto	25	–	–

1837–38—Expensa—*continued.*

		£.	s.	d.
1838:				
July	J. Tomkins, Esq., half-year's salary	25	–	–
	N. B. Ward, Esq. - ditto	25	–	–
	Brettell, printer	28	13	–
	Stamps for receipts	1	4	–
	Birch, carpenter	9	12	–
	Fenning, coal merchant	21	14	–
	Mitchell, glassman	4	17	6
	New, stationer	19	7	10
	Thompson, cutler	70	5	6
	Balance	273	5	8
	£.	2,183	17	9

Audit, 16 July 1838.

The Balance of this Account is Two hundred and Seventy-three pounds Five shillings and Eight-pence.

Henry Halford, President.
Anthony Carlisle, President of Royal College of Surgeons.
Thomas Watson, Senior Censor.

1838–39.

ACCEPTA.

		£.	s.	d.
1838:	Balance of last Account	273	5	8
October	Annual Grant from Parliament £. 1,850 – –			
	Deduct Stamp for Receipt – 10 –			
		1,849	10	–
	£.	2,122	15	8

EXPENSA.

			£.	s.	d.
August		J. Utton, six weeks' wages	6	–	–
		Water-rate to Midsummer	1	17	6
September		Disbursements by the Inspector	2	17	4
		Church-rate	2	3	4
		J. Utton, five weeks' wages	5	–	–
		Disbursements by Inspector	2	13	5
October	11	J. A. Gillham, Esq., a quarter's salary	62	10	–
		Assessed taxes to Michaelmas	6	–	5
„	27	J. Utton, six weeks' wages	6	–	–
		Disbursements by the Inspector	4	5	8
		Miss Grant, half-year's rent to Michaelmas	57	10	–
		Ellard, plumber	8	15	–
December	15	J. Utton, seven weeks' wages	7	–	–
		Disbursements by Inspector	2	13	1
1839:					
January	7	Dr. Hue, half-year's salary	100	–	–
		J. A. Gillham, Esq., a quarter's salary	62	10	–
		J. C. Carpue, Esq., half-year's salary	50	–	–
		C. R. Aikin, Esq. - ditto	37	10	–
		E. Leese, Esq. - ditto	37	10	–
		W. T. Lewis, Esq. - ditto	30	–	–
		F. Ager, Esq. - ditto	25	–	–
		A. Buchanan, Esq. - ditto	25	–	–
		R. H. Robertson, Esq. ditto	25	–	–
		R. Semple, Esq. - ditto	25	–	–
		S. H. Sterry, Esq. - ditto	25	–	–
		J. Tomkins, Esq. - ditto	25	–	–
		N. B. Ward, Esq. - ditto	25	–	–
		Brettell, printer	24	2	6
		Fenning, coal merchant	10	10	–
		Mitchell, glassman	11	14	6
		Thompson	50	3	6
„	15	J. Utton, four weeks' wages	4	–	–
		Disbursements by Inspector	9	19	5
		Water-rate	1	17	6
February	22	J. Utton, 6 weeks' wages	6	–	–
		Sewers-rate	1	12	6
		Disbursements by Inspector	2	19	2

1838-39—EXPENSA—*continued.*

1839:		£.	s.	d.
March - 14	J. Utton, three weeks' wages	3	–	–
	Disbursements by the Inspector	1	12	10
	Parish rates	4	15	10
April - 26	J. A. Gillham, Esq., a quarter's salary	62	10	–
	Miss Grant, half-year's rent	57	10	–
	J. Hutton, five weeks' wages	5	–	–
	Disbursements by Inspector	2	16	9
	Paving-rate	1	17	7
May - 20	Church-rate	2	3	4
	Assessed taxes to Lady-day	6	–	5
	Poor-rates to - ditto	5	16	–
	J. Utton, five weeks' wages	5	–	–
	Disbursements by Inspector	2	4	10
June - 25	Sir H. Halford, Bart, President of Royal College of Physicians	100	–	–
	Dr. Watson, Senior Censor	100	–	–
July - 1	H. Lee Thomas, Esq., President of Royal College of Surgeons	100	–	–
	Dr. Hue, Registrar, half-year's salary	100	–	–
	J. A. Gillham, Esq., quarter year's salary	62	10	–
	J. C. Carpue, Esq., half year's ditto	50	–	–
	C. R. Aikin, Esq. - ditto	37	10	–
	E. Leese, Esq. - ditto	37	10	–
	W. J. Lewis, Esq. - ditto	30	–	–
	F. Ager, Esq. - ditto	25	–	–
	A. Buchanan, Esq. - ditto	25	–	–
	R. H. Robertson, Esq. ditto	25	–	–
	R. Semple, Esq. - ditto	25	–	–
	H. S. Sterry, Esq. - ditto	25	–	–
	J. Tomkins, Esq. - ditto	25	–	–
	N. B. Ward, Esq. - ditto	25	–	–
	Brettell, printer	28	5	6
	Fenning, coal merchant	9	18	–
	Mitchell, glassman	11	10	–
	New, stationer	14	9	8
	Thompson, cutler	45	2	–
	Stamps for receipts	2	1	6
	Boothby	4	5	6
	J. Utton, five weeks' wages	5	–	–
	Disbursements by Inspector	2	12	8
	Balance	255	18	5
	£.	2,122	15	8

AUDIT, 1 July 1839.

The Balance of this Account is Two hundred and Fifty-five pounds Eighteen shillings and Five-pence.

Henry Halford, President of the Royal College of Physicians.
H. Leigh Thomas, President of the Royal College of Surgeons.
Thomas Mayo, Senior Censor.

1839–40.

1839:	ACCEPTA.	£.	s.	d.
	Balance of last Account	255	18	5
	Annual Grant from Parliament - £. 1,850 – –			
	Deduct Stamp for Receipt - - – 10 –			
		1,849	10	–
	£.	2,105	8	5
	EXPENSA.			
August - -	J. Utton, seven weeks' wages	7	–	–
	Water-rate to Midsummer	1	17	6
	Leverton, carpenter	1	10	6
	Disbursements by Inspector	2	19	10
October - -	J. A. Gillham, Esq., a quarter's salary	62	10	–
„ 12 -	J. Utton, eight weeks' wages	8	–	–
	Disbursements by Inspector	2	13	6
	Paving-rate to Midsummer	2	3	1
„ 15 -	Poor-rate to Michaelmas	5	15	–

1839-40.—Expensa—*continued.*

			£.	s.	d.
1839:					
October - 20	Miss Grant, half-year's rent		57	10	–
	J. Utton, six weeks' wages		6	–	–
	Disbursements by Inspector		4	9	8
1840:	Church-rate		–	18	–
January - -	J. Utton, six weeks' wages		6	–	–
	Disbursements by Inspector		3	7	5
„ - 14	Dr. Hue, half-year's salary		100	–	–
	J. A. Gillham, Esq., quarter year's salary		62	10	–
	J. C. Carpue, Esq., half-year's salary		50	–	–
	C. R. Aikin, Esq. - ditto		37	10	–
	E. Leese, Esq. - - ditto		37	10	–
	W. J. Lewis, Esq., - ditto		30	–	–
	F. Ager, Esq. - - ditto		25	–	–
	A. Buchanan, Esq. - ditto		25	–	–
	R. H. Robertson, Esq. ditto		25	–	–
	R. Semple, Esq. - - ditto		25	–	–
	S. H. Sterry, Esq. - ditto		25	–	–
	J. Tomkins, Esq. - ditto		25	–	–
	N. B. Ward, Esq. - ditto		25	–	–
	Stamps for receipts		–	17	–
	Brettell, printer		15	15	–
	Mansfield, builder		31	–	7
	Mitchell, glassman		9	17	6
	New, stationer		14	17	6
	Thompson, cutler		40	2	–
	Boothby, smith		1	6	6
February - 19	J. Utton, six weeks' wages		6	–	–
	Disbursements by Inspector		5	4	4
	Paving-rate		1	15	6
March - 25	J. Utton, six weeks' wages		6	–	–
	Disbursements by Inspector		1	14	3
	Assessed taxes to Michaelmas		6	–	5
	Water-rate to Christmas		1	17	6
April - - 7	J. A. Gillham, a quarter's salary		62	10	–
	Poor-rate to Lady-day		5	16	–
	J. Utton, two weeks' wages		2	–	–
	Disbursements by Inspector		1	7	10
„ - - 22	Miss Grant, half-year's rent to Lady-day		57	10	–
June - - -	John Utton, eight weeks' wages		8	–	–
	Disbursements by Inspector		2	15	1
„ - - 25	Sir H. Halford, Bart., President of College of Physicians		100	–	–
	Dr. Mayo, Senior Censor		100	–	–
July - - 6	R. Keate, Esq., President of College of Surgeons		100	–	–
	Dr. Hue, Registrar, half-year's salary		100	–	–
	J. A. Gillham, Esq., quarter year's salary		62	10	–
	J. C. Carpue, Esq., half-year's salary		50	–	–
	C. R. Aikin, Esq. - ditto		37	10	–
	E. Leese, Esq. - - ditto		37	10	–
	W. J. Lewis, Esq. - ditto		30	–	–
	F. Ager, Esq. - - ditto		25	–	–
	A. Buchanan, Esq. - ditto		25	–	–
	R. H. Robertson, Esq. - ditto		25	–	–
	R. Semple, Esq. - - ditto		25	–	–
	S. H. Sterry, Esq. - ditto		25	–	–
	J. Tomkins, Esq. - ditto		25	–	–
	N. B. Ward, Esq. - ditto		25	–	–
	Stamps for receipts		1	4	6
	Brettell, printer		27	2	6
	Fenning, coal merchant		20	11	–
	Mitchell, glassman		7	18	6
	New, stationer		9	19	6
	Thompson, cutler		40	–	–
	J. Utton, four weeks' wages		4	–	–
	Disbursements by Inspector		1	9	3
	Balance		253	11	8
		£.	2,105	8	5

Audit, 6 July 1840.

The Balance of this Account is Two hundred and Fifty-three pounds Eleven shillings and Eight-pence.

Henry Halford, President of the Board.
Robert Keate, President of the Royal College of Surgeons.

1840-41.

			£.	s.	d.
1840:		ACCEPTA.			
		Balance of last Account		253	11	8
		Annual Grant from Parliament £. 1,850 – –			
		Deduct Stamp for Receipt – 10 –			
			1,849	10	–
			2,103	1	8
		EXPENSA.			
July		J. Utton, three weeks' wages to 18th instant	3	–	–
		Disbursements by the Inspector	8	4	3
		Assessed taxes to Lady-day	6	–	5
		Paving-rate	2	7	11
		Water-rate	1	17	6
September		J. A. Gillham, Esq., a quarter's salary	62	10	–
		Disbursements by Inspector	3	16	–
		J. Utton, ten weeks' wages	10	–	–
October	22	Miss Grant, half-year's rent to Michaelmas	57	10	–
November	14	J. Utton, six weeks' wages	6	–	–
		Disbursements by Inspector	2	1	5
		Assessed taxes to Michaelmas	6	12	5
		Church-rate	2	3	4
		Sewers-rate	1	8	9
December	2	J. Utton, three weeks' wages	3	–	–
		Disbursements by Inspector	–	18	6
1841:		Poor-rate	5	15	–
January	5	J. Utton, four weeks' wages to 26th ultimo	4	–	–
		Disbursements by Inspector	6	12	2
		J. A. Gillham, Esq., quarter's salary	62	10	–
„	25	Dr. Hue, half-year's salary	100	–	–
		J. C. Carpue, Esq. ditto	50	–	–
		C. R. Aikin, Esq. ditto	37	10	–
		E. Leese, Esq. ditto	37	10	–
		F. Ager, Esq. ditto	25	–	–
		A. Buchanan, Esq. ditto	25	–	–
		W. J. Lewis, Esq. ditto	30	–	–
		R. H. Robertson, Esq. ditto	25	–	–
		R. Semple, Esq. ditto	25	–	–
		S. H. Sterry, Esq. ditto	25	–	–
		J. Tomkins, Esq. ditto	25	–	–
		N. B. Ward, Esq. ditto	25	–	–
		Brettell, printer	23	3	–
		Fenning, coal merchant	10	4	–
		Mitchell, glassman	11	16	2
		Mansfield, builder	4	1	6
		New, stationer	12	9	6
		Thompson, cutler	45	3	6
		Stamps for receipts	–	17	–
February	5	Disbursements by Inspector	1	4	6
		J. Utton, five weeks' wages	5	–	–
		Bills of mortality	1	1	–
		Water-rate to Christmas	1	17	6
		Paving-rate to Christmas	1	18	4
March	25	J. Utton, seven weeks' wages	7	–	–
		Disbursements by the Inspector	3	11	10
		J. A. Gillham, Esq., a quarter's salary	62	10	–
April	20	Miss Grant, half-year's rent to Lady-day	57	10	–
		J. Utton, four weeks' wages	4	–	–
		Assessed taxes to Lady-day	6	12	5
		Disbursements by Inspector	1	9	2
		Parish rates	5	15	–
June	10	J. Utton, seven weeks' wages	7	–	–
		Disbursements by Inspector	2	13	10
„	25	Sir H. Halford, Bart., President Royal College of Physicians	100	–	–
		Dr. Bright, Senior Censor	100	–	–
July	5	Dr. Hue, Registrar	100	–	–
		J. P. Vincent, Esq., President of Royal College of Surgeons	100	–	–

1840–41—Expensa—*continued.*

1841:		£.	s.	d.
July - - 5	J. A. Gillham, Esq., quarter's salary	62	10	–
	J. C. Carpue, Esq., half-year's salary	50	–	–
	C. R. Aikin, Esq. - ditto	37	10	–
	E. Leese, Esq. - - ditto	37	10	–
	W. J. Lewis, Esq. - ditto	30	–	–
	F. Ager, Esq. - - ditto	25	–	–
	A. Buchanan, Esq. - ditto	25	–	–
	R. H. Robertson, Esq. - ditto	25	–	–
	R. Semple, Esq. - - ditto	25	–	–
	S. H. Sterry, Esq. - ditto	25	–	–
	J. Tomkins, Esq. - ditto	25	–	–
	N. B. Ward, Esq. - ditto	25	–	–
	Brettell, printer	30	15	–
	Mitchell, glassman	10	9	–
	New, stationer	8	15	9
	Thompson, cutler	50	–	–
	Stamps for receipts	1	4	6
	Fenning, coal-merchant	10	4	–
	Mansfield, builder	7	8	2
	J. Utton, 3 weeks' wages	3	–	–
	Disbursements by Inspector	–	18	6
	Quarter's rent of Surrey Chapel school-room	2	10	–
	Balance	222	–	10
	£.	2,103	1	8

Audit, 5 July 1841.

The Balance of this Account is Two hundred and Twenty-two pounds and Ten-pence.

Edward J. Seymour, Senior Censor.
John P. Vincent, President, Royal College of Surgeons.

1841–42.

1841:	ACCEPTA.	£.	s.	d.
	Balance of last Account	222	–	10
November - 29	Annual Grant from Parliament - £. 1,850 – –			
	Deduct Stamp for Receipt - – 10 –			
		1,849	10	–
	£.	2,071	10	10

	EXPENSA.	£.	s.	d.
August - 5	J. Utton, 5 weeks' wages	5	–	–
	Paving-rate	2	10	–
	Disbursements by Inspector	2	10	8
October - 4	J. Utton, seven weeks' wages	7	–	–
	Disbursements by Inspector	1	12	5
	Church-rate	1	1	8
	J. A. Gillham, Esq., quarter year's salary to Michaelmas	62	10	–
	Miss Grant, half-year's rent to Michaelmas	57	10	–
November - 12	J. Utton, seven weeks' wages	7	–	–
	Disbursements by Inspector	2	–	3
	Parish rates to Midsummer	6	4	7
	Water-rate	2	8	–
	Assessed taxes	6	14	9
December - 28	Disbursements by Inspector	6	16	4
1842:				
January - 1	J. Utton, seven weeks' wages	7	–	–
	Dr. Hue, half-year's salary	100	–	–
	J. A. Gillham, Esq., quarter year's salary	62	10	–
	J. C. Carpue, Esq., half-year's salary	50	–	–
	C. R. Aikin, Esq. - ditto	37	10	–
	E. Leese, Esq. - - ditto	37	10	–

 (*continued*)

1841-42—EXPENSA—*continued.*

1842:		£.	s.	d.
January - 1	W. J. Lewis, Esq., half-year's salary	30	–	–
	F. Ager, Esq. - - ditto	25	–	–
	A. Buchanan, Esq. - ditto	25	–	–
	R. H. Robertson, Esq. - ditto	25	–	–
	R. Semple, Esq. - - ditto	25	–	–
	S. H. Sterry, Esq. - ditto	25	–	–
	J. Tomkins, Esq. - - ditto	25	–	–
	N. Ward, Esq. - - ditto	25	–	–
	Brettell, printer	20	3	–
	Fenning, coal merchant	9	12	–
	Mansfield, builder	22	12	9
	Mitchell, glassman	7	19	8
	New, stationer	11	3	9
	Thompson, cutler	35	13	–
	Paving-rate	2	–	–
	Water-rate	2	8	–
February - 10	J. Utton, six weeks' wages	6	–	–
	Disbursements by Inspector	3	5	1
April - - 4	J. Utton, seven weeks' wages	7	–	–
	Disbursements by the Inspector	2	14	9
	Sewers-rate	1	8	9
	Poor-rate to 1st instant	6	5	7
	J. A. Gillham, Esq., a quarter's salary	62	10	–
„ - - 13	Miss Grant, half-year's rent	57	10	–
May - - 17	J. Utton, six weeks' wages	6	–	–
	Disbursements by Inspector	1	12	11
	Assessed taxes	6	14	6
June - - 25	Sir H. Halford, Bart., President of Royal College of Physicians	100	–	–
	Dr. Seymour	100	–	–
„ - - 29	J. Utton, seven weeks' wages	7	–	–
	Disbursements by Inspector	1	19	–
	Paving and cleansing rate	2	15	–
July - - 13	J. G. Guthrie, Esq., President of Royal College of Surgeons	100	–	–
	Dr. Hue, Registrar	100	–	–
	J. A. Gillham, Esq., a quarter's salary	62	10	–
	J. C. Carpue, Esq., half-year's salary	50	–	–
	J. C. Aikin, Esq. - ditto	37	10	–
	E. Leese, Esq. - - ditto	37	10	–
	W. J. Lewis, Esq. - ditto	30	–	–
	F. Ager, Esq. - - ditto	25	–	–
	A. Buchanan, Esq. - ditto	25	–	–
	R. H. Robertson, Esq. - ditto	25	–	–
	R. Semple, Esq. - - ditto	25	–	–
	S. H. Sterry, Esq. - ditto	25	–	–
	J. Tomkins, Esq. - ditto	25	–	–
	N. Ward, Esq. - - ditto	25	–	–
	Fenning, coal-merchant	9	18	–
	Mitchell, printer	28	7	6
	Mitchell, glassman	9	10	–
	New, stationer	4	4	1
	Thompson, cutler	45	1	4
	Stamps for receipts	2	1	6
	Year's rent of Surrey Station	10	10	–
	J. Utton, six weeks' wages	6	–	–
	Water-rate	2	8	–
	Disbursements by Mr. Gillham	2	6	5
	Balance	203	17	7
	£.	2,071	10	10

AUDIT, 9 August 1842.

The Balance of this Account is Two hundred and three pounds Seventeen shillings and Seven-pence.

Henry Halford, President.
Henry Holland, Senior Censor.
Anthony White,

1842–43.

ACCEPTA.

		£.	s.	d.
1842:	Balance of last Account			203 17 7
	Annual Grant from Parliament	1,850	–	–
	Income Tax on 1,400 *l.* – £. 40 16 8			
	Deduct Stamp for Receipt – 10 –			
		41 6 8		
				1,808 13 4
		£.		2,012 10 11

EXPENSA:

		£.	s.	d.
	Arrears of rent of Surrey Chapel	5	7	6
October - 22	J. Utton, 10 weeks' wages	10	–	–
	Parish rates to Michaelmas	6	4	7
	Executrix of late J. A. Gillham, half-quarter's salary	31	5	–
	J. Tomkins, Esq., Inspector, half-quarter's salary	25	–	–
	Disbursements by Inspector	2	18	5
	Miss Grant, half-year's rent	57	10	–
December - 15	J. Utton, eight weeks' wages	8	–	–
	Disbursements by Inspector	1	17	6
	Assessed Taxes	6	14	6
	Paving-rate	2	5	6
	Water-rate to Christmas	2	8	–
1843:				
January - 23	J. Utton, six weeks' wages	6	–	–
	Disbusements by Inspector	3	13	6
	Dr. Hue, half-year's salary	97	1	8
	J. Tomkins, Esq., quarter year's salary	48	10	10
	J. C. Carpue, Esq., half-year's salary	48	10	10
	C. R. Aikin, Esq. - ditto	36	8	10
	F. Ager, Esq. - - ditto	24	5	5
	A. Buchanan, Esq. - ditto	24	5	5
	G. M. Leese, Esq. - ditto	30	6	9
	W. J. Lewis, Esq. - ditto	29	2	6
	R. H. Robertson, Esq. ditto	24	5	5
	R. Semple, Esq. - ditto	24	5	5
	G. Simpson, Esq. - ditto	24	5	5
	S. H. Sterry, Esq. - ditto	24	5	5
	N. B. Ward, Esq. - ditto	24	5	5
	Boothby	2	11	9
	Mansfield	54	–	–
	Mitchell, printer	19	7	–
	Holl & Bevan	9	12	–
	Mitchell, glassman	8	15	–
	Nash, upholsterer	10	15	–
	New, stationer	1	16	–
	Thompson	40	–	6
	Stamps for receipts	–	13	6
April - - 4	J. Utton, 10 weeks' wages	10	–	–
	Disbursements by Inspector	3	15	11
	Poor-rate	5	15	–
	Assessed taxes to Lady-day	6	14	6
	Income tax for house	3	7	1
	J. Tomkins, Esq., a quarter's salary	50	–	–
May - - -	Miss Grant, half-year's rent, less Income tax	54	2	11
	J. Utton, eight weeks' wages	8	–	–
	Disbursements by Inspector	3	5	6
	Paving-rate	2	15	–
June - - 26	Sir H. Halford, Bart., President	97	1	8
	Dr. Holland	97	1	8
	Dr. Hue, half-year's salary	97	1	8
	A. White, Esq.	97	1	8
	J. Tomkins, a quarter's salary	47	1	8
	J. C. Carpue, Esq., half-year's salary	48	10	10
	C. R. Aikin, Esq. - ditto	36	8	10
	G. Simpson, Esq. - ditto	36	8	10
	F. Ager, Esq. - - ditto	24	5	5
	A. Buchanan, Esq. - ditto	24	5	5
	G. M. Leese, Esq. - ditto	24	5	5
	W. J. Lewis, Esq. - ditto	29	2	6
	R. H. Robertson, Esq. ditto	24	5	5
	R. Semple, Esq. - ditto	24	5	5

1842-43—EXPENSA—*continued.*

		£.	s.	d.
1843:				
June - - 27	S. H. Sterry, Esq., half-year's salary - - - -	24	5	5
	N. B. Ward, Esq. - ditto - - - - - -	24	5	5
	Brazier - - - - - - - - - -	3	5	6
	Mitchell, printer - - - - - - - - -	13	18	–
	Mitchell, glassman - - - - - - - -	9	13	6
	Thompson, cutler - - - - - - - - -	36	1	6
	Worsfold, stationer - - - - - - - -	–	19	–
	Sewers-rate - - - - - - - - -	1	8	9
	J. Utton, four weeks' wages - - - - - -	4	–	–
	Disbursements by Inspector - - - - - -	3	18	9
	Stamps for receipts - - - - - - - -	–	19	–
	Balance - - - -	257	19	2
	£.	2,012	10	11

AUDIT, 4 July 1843.

The Balance of this Account is Two hundred and Fifty-seven pounds Nineteen shillings and Two-pence.

Henry Halford, President.
C. Hue, Registrar.

1843-44.

ACCEPTA.

		£.	s.	d.
1843:	Balance of last Account - - - - - - - -	257	19	2
	Annual Grant from Parliament - -	1,850	–	–
	Income Tax on 1,350*l.* - £. 39 7 6			
	Deduct Stamp for Receipt - – 10 –			
		39	17	6
		1,810	2	6
		2,068	1	8

EXPENSA.

		£.	s.	d.
	Rent of room in Surrey Chapel - - - - -	10	10	–
August - 23	J. Utton, seven weeks' wages - - - - - -	7	–	–
	Disbursements by Inspector - - - - - -	3	–	1
	Water-rate - - - - - - - - -	2	8	–
October - 26	J. Tomkins, Esq., a quarter's salary - - - -	48	10	10
	J. Utton, 10 weeks' wages - - - - - -	10	–	–
	Paving-rate - - - - - - - - -	2	5	–
	Poor-rate - - - - - - - - -	5	15	–
	Assessed taxes - - - - - - - -	8	18	3
	Disbursements by Inspector - - - - - -	3	3	4
	Miss Grant, half-year's rent - - - - - -	55	16	5
	J. Tomkins, Esq., a quarter's salary - - - -	48	10	10
	Dr. Hue - half-year's salary - - - - -	97	1	8
	J. C. Carpue, Esq. ditto - - - - - -	48	10	10
	C. R. Aikin, Esq. ditto - - - - - -	36	8	2
	G. Simpson, Esq. ditto - - - - - -	36	8	2
	F. Ager, Esq. - ditto - - - - - -	24	5	5
	A. Buchanan, Esq. ditto - - - - - -	24	5	5
	G. M. Leese, Esq. ditto - - - - - -	24	5	5
	W. J. Lewis, Esq. ditto - - - - - -	29	2	6
	R. H. Robertson, Esq. ditto - - - - -	24	5	5
	R. Semple, Esq. - ditto - - - - - -	24	5	5
	S. H. Sterry, Esq. ditto - - - - - -	24	5	5
	N. B. Ward, Esq. ditto - - - - - -	24	5	5
	Stamps for receipts - - - - - - - -	–	14	6
	Boothby, ironmonger - - - - - - - -	3	18	4
	Holl & Bevan - - - - - - - - -	9	–	–
	Mansfield, builder - - - - - - - -	17	18	–
	Mitchell, glassman - - - - - - - -	8	10	–
	Mitchell, printer - - - - - - - - -	23	5	–
	Thompson, cutler - - - - - - - - -	36	–	–
	Worsfold, stationer - - - - - - - -	5	5	4
	J. Utton, 13 weeks' wages - - - - - -	13	–	–
	Disbursements by Inspector - - - - - -	9	19	3
April - - 8	J. Utton, 11 weeks' wages - - - - - -	11	–	–
	Disbursements by Inspector - - - - - -	4	17	9

1843–44—EXPENSA—*continued.*

1844:		£.	s.	d.
April - - 8	Water-rate	2	8	–
	Assessed taxes	7	4	9
	Property-tax on house	1	13	6
	Parish rates	5	5	–
	Executor of late Sir H. Halford, half a year's salary	48	10	10
„ - 25	Miss Grant, half-year's rent	55	16	6
May - - -	Paving-rate	2	12	8
	Sewers rate	2	17	6
June - - -	J. Utton, eight weeks' wages	8	–	–
	Disbursements by Inspector	3	16	3
	Dr. Paris, President	97	1	8
	Dr. Roupell, Senior Censor	48	10	10
	J. G. Andrews, President Royal College of Surgeons	97	1	8
	J. Tomkins, Inspector, half-year's salary	97	1	8
	Dr. Hue, Registrar - - - ditto	97	1	8
	J. C. Carpue, Esq. - - - - ditto	48	10	10
	G. Simpson, Esq. - - - - ditto	48	10	10
	C. R. Aikin, Esq. - - - - ditto	36	8	2
	F. Ager, Esq. - - - - - ditto	24	5	5
	A. Buchanan, Esq. - - - ditto	24	5	5
	E. Leese, Esq. - - - - - ditto	24	5	5
	W. J. Lewis, Esq. - - - - ditto	29	2	6
	R. H. Robertson, Esq. - - ditto	24	5	5
	R. Semple, Esq. - - - - ditto	24	5	5
	S. H. Sterry, Esq. - - - - ditto	24	5	5
	N. B. Ward, Esq. - - - - ditto	24	5	5
	Stamps for receipts	–	19	–
	Boothby	–	16	10
	Mitchell, printer	18	13	6
	Mitchell, glassman	6	12	8
	Thompson, cutler	45	7	–
	Worsfold, printer	3	4	6
	Rent of Surrey Chapel school-room	10	10	–
		2	1	5
		5	–	–
	Balance	300	8	10
	£.	2,068	1	8

AUDIT, 8 July 1844.

The Balance of this Account is Three hundred pounds Eight shillings and Ten-pence.

John Ayrton Paris.
John Andrews.
C. Hue, Registrar.

1844–45.

1844:	ACCEPTA.		£.	s.	d.
	Balance of last Account		300	8	10
	Annual Grant from Parliament	£. 1,850 – –			
	Deduct Income-tax on £. 1,375, and stamp	40 12 1			
			1,809	7	11
	£.		2,109	16	9
	EXPENSA.				
October - -					
November - -	Miss Grant, half-year's rent		55	16	6
	Property-tax		1	13	6
	Assessed taxes		7	4	9
	Paving-rate		2	3	1
	Water-rate		2	8	–
	Burges		1	–	–
	J. Utton, 17 weeks' wages		17	–	–
1845:	Disbursements by Inspector		6	17	4
	Poor-rate		5	5	5
January - -	J. Utton, nine weeks' wages		9	–	–
	Disbursements by Inspector		9	4	8
	Water-rate		2	8	–
„ - - 20	Dr. Hue, half-year's salary		97	1	8
	J. Tomkins, Esq. ditto		97	1	8
	J. C. Carpue, Esq. ditto		48	10	10
	G. Simpson, Esq. ditto		48	10	10
	C. R. Aikin, Esq. ditto		36	8	2
	F. Ager, Esq. - - ditto		24	5	5

1844-45—EXPENSA—*continued.*

1845:		£.	s.	d.
January - 20	A. Buchanan, Esq., half-year's salary	24	5	5
	G. M. Leese, Esq. - - - ditto	24	5	5
	W. J. Lewis, Esq. - - - ditto	29	2	6
	R. H. Robertson, Esq - - ditto	24	5	5
	R. Semple, Esq. - - - ditto	24	5	5
	J. H. Sterry, Esq. - - - ditto	24	5	5
	N. B. Ward, Esq. - - - ditto	24	5	5
	Stamps for receipts	-	14	-
	Brettell, printer	16	10	6
	Boothby	5	10	1
	Mansfield, builder	44	5	6
	Mitchell, printer	9	18	-
	Mitchell, glassman	9	16	9
	Clarke, cutler	45	7	6
	Cubitt, builder	6	4	6
	Holl & Bevan, coal merchants	19	4	-
	Worsfold, stationer	3	19	-
April - - 30	Miss Grant, half-year's rent - - - £. 57 10 -			
	Repairs of foundation, 24 *l.* 6 *s.* 11 *d.*; Property-tax, 1 *l.* 13 *s.* 7 *d.* - - - - - 26 - 6			
		31	9	6
	Property-tax	1	13	6
	Assessed taxes	7	4	9
	Parish rates	5	5	5
	J. Utton, 21 weeks' wages	21	-	-
	Disbursements by Inspector	10	1	-
June - - 25	Dr. Paris, President Royal College of Physicians	97	1	8
	Dr. Roupell, Senior Censor	97	1	8
July - - 18	Sir B. Brodie, Bart., President Royal College of Surgeons	97	1	8
	Dr. Hue, half-year's salary	97	1	8
	J. Tomkins, Esq., - ditto	97	1	8
	J. C. Carpue, Esq. - ditto	48	10	10
	G. Simpson, Esq. - ditto	48	10	10
	C. R. Aikin, Esq. - ditto	36	8	2
	W. J. Lewis, Esq. - ditto	29	2	6
	F. Ager, Esq. - - ditto	24	5	5
	A. Buchanan, Esq. - ditto	24	5	5
	G. M. Leese, Esq. - ditto	24	5	5
	R. H. Robertson, Esq. ditto	24	5	5
	R. Semple, Esq. - - ditto	24	5	5
	S. H. Sterry, Esq. - ditto	24	5	5
	N. B. Ward, Esq. - ditto	24	5	5
	Stamps for receipts	-	18	6
	Boothby	2	5	3
	Brettell, printer	24	9	6
	Clark, cutler	36	2	6
	Holl & Bevan, coal merchants	9	12	-
	Mitchell, glassman	5	18	7
	Worsfold, stationer	2	19	6
	Trustees of Surrey Chapel	10	10	-
	J. Utton, seven weeks' wages	7	-	-
	Disbursements by Inspector	2	8	5
	Paving-rate to Midsummer	2	17	6
	Water-rate - - ditto	2	8	-
	Balance	299	9	7
	£.	2,109	16	9

AUDIT, 4 August 1845.

The Balance of this Account is Two hundred and ninety-nine pounds Nine shillings and Seven-pence.

John Ayrton Paris, President.
B. G. Babington, Senior Censor, College of Physicians.
Samuel Cooper, President of College of Surgeons.
C. Hue, Registrar.

1845–46.

		£.	s.	d.
1845:	**ACCEPTA.**			
August - 9	Accepta from Dr. Turner (late Treasurer) - - -	299	9	7
October - 18	Grant from Parliament - - - - £. 1,850 – –			
	Stamp and Property-tax deducted - 40 12 1			
		1,809	7	11
	Cheque in advance to Inspector returned - - - -	10	–	–
	£.	2,118	17	6
	EXPENSA.			
August - 5	Indemnity bond stamp - - - - - - -	1	15	–
„ - 16	Cheque in advance to Inspector for current petty cash account - - - - - - - - - -	10	–	–
October - 15	Miss Grant, half-year's rent - - - - - -	55	16	6
November - 18	J. Utton, 15 weeks' wages - - - - - -	15	–	–
	Assessed taxes - - - - - - - - -	7	4	9
	Property-tax - - - - - - - - -	1	15	–
	Poor-rates - - - - - - - - -	4	15	4
1846:	Disbursements by Inspector - - - - - -	5	10	9
January - -	Dr. Hue, Registrar, half-year's salary - - - -	97	1	8
	J. N. Tomkins, Esq., Inspector, ditto - - - -	97	1	8
„ - 12	J. Utton, nine weeks' wages - - - - - -	9	–	–
	Paving-rate - - - - - - - - -	2	7	11
	Water-rate - - - - - - - - -	2	8	–
	Christmas-boxes - - - - - - - - -	1	14	6
	Candles, &c. - - - - - - - - -	3	15	–
	Disbursements by Inspector - - - - - -	4	2	10
	Clark (points) - - - - - - - - -	45	6	–
	Mitchell (glass) - - - - - - - - -	7	10	–
	Brettell (printer) - - - - - - - - -	24	15	–
	Mansfield (builder) - - - - - - - - -	5	17	6
	Worsfold (stationer) - - - - - - - - -	5	3	6
	Holl & Bevan (coals) - - - - - - - - -	8	14	–
	Boothby (locksmith) - - - - - - - - -	2	2	–
	J. C. Carpue, Esq., half-year's salary - - - -	48	10	10
	G. Simpson, Esq. - - ditto - - - - -	48	10	10
	C. R. Aikin, Esq. - - ditto - - - - -	36	8	2
	F. Ager, Esq. - - - ditto - - - - -	24	5	5
	A. Buchanan, Esq. - - ditto - - - - -	24	5	5
	G. M. Leese, Esq. - - ditto - - - - -	24	5	5
	W. J. Lewis, Esq. - - ditto - - - - -	29	2	6
	R. H. Robertson, Esq. - ditto - - - - -	24	5	5
	R. Semple, Esq. - - - ditto - - - - -	24	5	5
	J. H. Sterry, Esq. - - ditto - - - - -	24	5	5
	N. B. Ward, Esq. - - ditto - - - - -	24	5	5
	Stamps for receipts - - - - - - - -	–	12	6
April - - 4	J. Utton, 14 weeks' wages - - - - - -	14	–	–
	Poor-rates - - - - - - - - -	4	15	4
	Assessed taxes - - - - - - - - -	7	4	9
	Property-tax - - - - - - - - -	1	15	–
	Disbursements by Inspector - - - - - -	6	1	2
„ - - 14	Miss Grant, half year's rent - - - - - - -	55	16	6
June - - 23	Mr. Carpue's executors (one month and six days) - -	9	11	3
	Dr. Paris, President - - - - - - - -	97	1	8
	Dr. Babington, Senior Censor - - - - - -	97	1	8
	Dr. Hue, Registrar, half-year's salary - - - -	97	1	8
	J. N. Tomkins, Esq., Inspector, half-year's salary - -	97	1	8
	G. Simpson, Esq. - - - - - - - ditto - - -	48	10	10
	C. R. Aikin, Esq. - - - - - - - ditto - - -	36	8	2
	F. Ager, Esq. - - - - - - - - ditto - - -	24	5	5
	A. Buchanan, Esq. - - - - - - - ditto - - -	24	5	5
	G. M. Leese, Esq. - - - - - - - ditto - - -	24	5	5
	W. J. Lewis, Esq. - - - - - - - ditto - - -	29	2	6
	R. H. Robertson, Esq. - - - - - - ditto - - -	24	5	5
	R. Semple, Esq. - - - - - - - - ditto - - -	24	5	5
	J. H. Sterry, Esq. - - - - - - - ditto - - -	24	5	5
	N. B. Ward, Esq. - - - - - - - ditto - - -	24	5	5
	S. Cooper, Esq., President Royal College of Surgeons -	97	1	8

(*continued*)

1845-46—EXPENSA—*continued.*

1846:		£.	s.	d.
June - - 23	R. Wade, Esq., remaining term of Carpue's half - -	19	9	9½
	G. Gooper, Esq., - ditto - - - - ditto - - -	19	9	9½
	Stamps for receipts - - - - - - - - -	–	17	–
	Disbursements by Inspector - - - - - -	4	12	11
	Utton, 12 weeks - - - - - - -	12	–	–
July - - 6	Paving-rate - - - - - - - - -	2	17	6
	Sewers-rate - - - - - - - - -	1	8	9
	Mr. Burt's Surrey Chapel room - - - - -	10	10	–
	Brettell (printer) - - - - - - - -	23	15	6
	Worsfold (stationer) - - - - - - -	3	2	6
	Clark (points) - - - - - - - -	36	5	–
	Mitchell (glass) - - - - - - - -	5	10	–
	Boothby (tinman) - - - - - - - -	1	4	3
	Holl & Bevan (coals) - - - - - - -	8	8	–
	Water-rate to Midsummer - - - - - -	2	8	–
		1,772	10	5
	Balance - - -	346	7	1
	£.	2,118	17	6

AUDIT, 6 July 1846.

The Balance of this Account is Three hundred and Forty-six pounds Seven shillings and One penny.

Geo. Burrows, Senior Censor.
Samuel Cooper, P. R. C. S.
C. Hue, Registrar.

1846-47.

1846:	ACCEPTA.	£.	s.	d.
	Accepta - - - - - - - - - - -	346	7	1
October - 2	Grant from Parliament - - - - £,1,850 – –			
	Deduct Property-tax - - - 40 2 1			
		1,809	17	11
	Cheque in advance returned - - - - - -	10	–	–
	£.	2,166	5	–
	EXPENSA.			
	Check in advance to Inspector - - - - -	10	–	–
„ - 2	Stamp for Parliamentary Grant - - - - -	–	10	–
„ - 12	Assessed taxes - - - - - - - -	7	4	9
	Property-tax - - - - - - - - -	1	15	–
	Poor's-rate - - - - - - - - -	4	15	4
	Utton, 14 weeks' wages - - - - - - -	14	–	–
	Disbursements by Inspector - - - - - -	6	2	7
„ - 13	Miss Grant, half-year's rent - - - - - -	55	16	6
December - 31	G. Simpson, Esq., half-year's salary - - - -	48	10	10
1847:				
January - -	Dr. Hue, Registrar - - - - - - -	97	1	8
	J. N. Tomkins, Esq. - - - - - - -	97	1	8
	C. R. Aikin, Esq. - - - - - - - -	36	8	2
	F. Ager, Esq. - - - - - - - -	24	5	5
	A. Buchanan, Esq. - - - - - - - -	24	5	5
	G. M. Leese, Esq. - - - - - - - -	24	5	5
	W. J. Lewis, Esq. - - - - - - - -	29	2	6
	R. H. Robertson, Esq. - - - - - - -	24	5	5
	R. Semple, Esq. - - - - - - - -	24	5	5
	J. H. Sterry, Esq. - - - - - - - -	24	5	5
	N. B. Ward, Esq. - - - - - - - -	24	5	5
	R. Wade, Esq. - - - - - - - -	24	5	5
	G. Cooper, Esq. - - - - - - - -	24	5	5
	Paving-rate to Christmas - - - - - -	2	7	11
	Water-rate - ditto - - - - - - -	2	8	–
	Utton, 12 weeks' wages - - - - - - -	12	–	–
	Disbursements by Inspector - - - - - -	10	2	2
	Worsfold (stationer) - - - - - - -	2	10	6
	Brettell (printer) - - - - - - - -	23	3	–
	Clark (points) - - - - - - - -	45	3	–
	Bevan (coals) - - - - - - - -	9	–	–
	Boothby (bell-hanger) - - - - - - -	7	19	8

1846–47—Expensa—*continued.*

		£.	s.	d.
1847:				
January - 11	Waugh & Son (oil cloth)	7	3	–
	Mitchell (glass)	6	10	7
	Stamps	–	13	6
April - 20	Miss Grant, half-year's rent	55	16	6
May - 10	Utton (messenger), 18 weeks' wages	18	–	–
	Poor's-rate	5	4	–
	Property-tax	1	15	–
	Assessed taxes	7	4	9
	Mansfield's bill	195	5	1
	Disbursements by Inspector	9	–	7
June - 25	Dr. Paris, President	97	1	8
	Dr. Burrows, Senior Censor	97	1	8
	Dr. Hue, Registrar	97	1	8
„ - 29	J. N. Tomkins, Esq., Inspector	97	1	8
„ - 30	W. Lawrence, Esq., President Royal College of Surgeons	97	1	8
	G. Simpson, Esq.	48	10	10
	F. Ager, Esq.	24	5	5
	A. Buchanan, Esq.	24	5	5
	G. M. Leese, Esq.	24	5	5
	W. J. Lewis, Esq.	29	2	6
	R. H. Robertson, Esq.	24	5	5
	R. Semple, Esq.	24	5	5
	J. H. Sterry, Esq.	24	5	5
	N. B. Ward, Esq.	24	5	5
	R. Wade, Esq.	24	5	5
	G. Cooper, Esq.	24	5	5
	Stamps for receipts	–	17	–
	Clarke (points)	45	6	–
	Brettell (printer)	29	15	6
	Worsfold (stationer)	7	3	9
	Bevan (coals)	10	12	–
	Mitchell (glass)	8	4	1
	Boothby (bell-hanger)	–	17	6
	Disbursements by Inspector	13	15	10
		1,946	7	1
	Balance	219	17	11
	£.	2,166	5	–

Audit, 5 July 1847.

The Balance of this Account is Two hundred and Nineteen pounds Seventeen shillings and Eleven-pence.

John Clendinning, Senior Censor.
C. Hue, Registrar.

1847–48.

Accepta.

		£.	s.	d.
1847:				
July - 5	Balance	219	17	11
November - 9	Part of Parliamentary Grant £. 2,095 – –			
	Property-tax deducted 39 2 –			
		2,055	19	10
„ - 20	Remaining part of Parliamentary Grant	200	–	–
	Cheque in advance to Inspector returned	10	–	–
	£.	2,485	17	9

Expensa.

July - 5	Cheque in advance to Inspector	10	–	–
„ - 29	Burls, for Surrey Chapel	10	10	–
October - 11	Utton, for 14 weeks	14	–	–
	Assessed taxes	7	4	9
	Property-tax	1	15	–
	Poor's-rate	6	10	–
	Water-rate, two quarters to Midsummer	2	8	–
	Disbursements by Inspector	6	2	3
„ - 22	Miss Grant, for house	55	16	6
November - 9	Stamp for Treasury, 1st payment	–	10	–
	Ditto - ditto 2d payment	–	4	–
1848:				
	Dr. Hue, Registrar	97	1	8
	J. N. Tomkins, Esq., Inspector	97	1	8

1847-48—EXPENSA—*continued.*

1848:		£.	s.	d.
	G. Simpson, Esq.	48	10	10
	F. Ager, Esq.	24	5	5
	A. Buchanan, Esq.	24	5	5
	G. M. Leese, Esq.	24	5	5
	W. J. Lewis, Esq.	29	2	6
	R. H. Robertson, Esq.	24	5	5
	R. Semple, Esq.	24	5	5
	J. H. Sterry, Esq.	24	5	5
	N. B. Ward, Esq.	24	5	5
	R. Wade, Esq.	24	5	5
	G. Cooper, Esq	24	5	5
	E. L. Hussey, Esq.	12	2	8
	C. H. Aikin, Esq.	12	2	8
	W. J. Gaye, Esq.	6	1	4
	—— Freeman, Esq.	6	1	4
	Nowell Stowers, Esq.	6	1	4
	Stamps for vaccinators	–	14	3
	Clarke (points)	54	4	–
	Brettell (printer)	24	13	6
	Mitchell (glass)	5	11	9
	Mansfield (house)	5	5	1
	Bevan (coals)	8	8	–
	Worsfold (stationer)	4	–	–
	Utton, 13 weeks	13	–	–
	Paving-rate	2	7	11
	Water-rate	2	8	–
	Disbursements by Inspector	11	4	1
April 5	Utton, 12 weeks	12	–	–
	Assessed taxes	8	10	4
	Poor's-rate	6	10	–
	Disbursements by Inspector	4	19	8
„ 8	Miss Grant (house)	55	16	6
	Dr. Paris, President	97	1	8
	Dr. Clendinning, Senior Censor	97	1	8
	Dr. Hue, Registrar	97	1	8
	Benjamin Travers, Esq., President Royal College of Surgeons	97	1	8
	J. N. Tomkins, Esq., Inspector	97	1	8
	G. Simpson, Esq.	48	10	10
	F. Ager, Esq.	24	5	5
	A. Buchanan, Esq.	24	5	5
	G. M. Leese, Esq.	24	5	5
	W. J. Lewis, Esq.	29	2	6
	R. H. Robertson, Esq.	24	5	5
	R. Semple, Esq.	24	5	5
	J. H. Sterry, Esq.	24	5	5
	N. B. Ward, Esq.	24	5	5
	R. Wade, Esq.	24	5	5
	G. Cooper, Esq.	24	5	5
	E. L. Hussey, Esq.	24	5	5
	C. H. Aikin, Esq.	24	5	5
	W. J. Gaye, Esq.	24	5	5
	—— Freeman, Esq.	24	5	5
	Nowell Stowers, Esq.	24	5	5
	Stamps for receipts	1	2	–
	Disbursements by Inspector	11	11	11
	Utton, 13 weeks	13	–	–
	Paving-rate	3	7	1
	Sewers-rate	2	12	–
	Clarke	45	2	–
	Brettell	26	2	–
	Boothby	13	6	–
	Bevan	8	14	–
	Mitchell	8	12	–
	Worsfold	5	10	6
	Burls (Surrey Chapel)	10	10	–
		1,919	15	4
	Balance	566	2	5
	£.	2,485	17	9

AUDIT, 3 July 1848.

The Balance of this Account is Five hundred and Sixty-six pounds Two shillings and Five-pence.

John Ayrton Paris, President.
Benjamin Travers, P. R. C. S.
James Alderson.
C. Hue, Registrar.

1848–49.

1848:	ACCEPTA.	£.	s.	d.
July - - 3	Balance - - - - - - - - - - -	566	2	5
October - 12	Parliamentary Grant - - - - £. 2,000 – –			
	Property-tax deducted - - - 42 16 9			
		1,957	3	3
	Cheque in advance returned - - - - - -	10	–	–
	£.	2,533	5	8
	EXPENSA.			
July - - 3	In advance to Inspector - - - - - - -	10	–	–
October - 2	Utton, 13 weeks - - - - - - - - -	13	–	–
	Water-rate, two quarters - - - - - - -	2	8	–
	Poor's-rate - - - - - - - - -	6	18	8
	Assessed taxes - - - - - - - -	7	4	8
	Disbursements by Inspector - - - - - -	4	18	8
„ - - 12	Stamp for receipt of grant - - - - - -	–	10	–
„ - - 26	Miss Grant - - - - - - - - -	55	16	6
December - 25	Dr. Hue, Registrar - - - - - - -	97	1	8
	J. N. Tomkins, Esq., Inspector - - - - -	97	1	8
	G. Simpson - - - - - - - - -	48	10	10
	F. Ager - - - - - - - - -	24	5	5
	A. Buchanan - - - - - - - - -	24	5	5
	G. M. Leese - - - - - - - - -	24	5	5
	W. J. Lewis - - - - - - - - -	29	2	6
	R. H. Robertson - - - - - - - -	24	5	5
	R. Semple - - - - - - - - -	24	5	5
	J. H. Sterry - - - - - - - - -	24	5	5
	N. B. Ward - - - - - - - - -	24	5	5
	R. Wade - - - - - - - - -	24	5	5
	G. Cooper - - - - - - - - -	24	5	5
	E. L. Hussey - - - - - - - - -	24	5	5
	C. A. Aikin - - - - - - - - -	24	5	5
	W. J. Gaye - - - - - - - - -	24	5	5
	W. H. Freeman - - - - - - - -	24	5	5
	Nowell Stowers - - - - - - - -	24	5	5
	Stamps for receipts - - - - - - -	–	17	6
	Disbursements by Inspector - - - - - -	12	15	6
	Utton, 14 weeks - - - - - - - -	14	–	–
	Paving-rate - - - - - - - - -	2	17	6
	Property-tax - - - - - - - - -	1	15	–
	Water-rate - - - - - - - - -	2	8	–
	Brettell (printer) - - - - - - - -	27	13	6
	Worsfold (stationer) - - - - - - -	6	4	6
	Clark (points) - - - - - - - -	54	6	–
	Bevan (coals) - - - - - - - -	8	2	–
	Boothby (ironmonger) - - - - - - -	5	15	9
	Mitchell (glass) - - - - - - - -	7	12	3
	Mansfield (builder) - - - - - - - -	8	1	6
1849:				
April - - 7	Disbursements by Inspector - - - - - -	4	10	4
	Utton, 13 weeks - - - - - - - -	13	–	–
	Poor's-rate - - - - - - - - -	6	10	–
	Assessed taxes - - - - - - - -	8	19	8
„ - - 24	Miss Grant - - - - - - - - -	55	16	3
June - - 24	Dr. Paris, President - - - - - - -	97	1	8
	Dr. Alderson, Senior Censor - - - - - -	97	1	8
	E. Stanley, Esq., President of Royal College of Surgeons -	97	1	8
	Dr. Hue, Registrar - - - - - - -	97	1	8
	J. N. Tomkins, Esq., Inspector - - - - -	97	1	8
	G. Simpson - - - - - - - - -	48	10	10
	F. Ager - - - - - - - - -	24	5	5
	A. Buchanan - - - - - - - - -	24	5	5
	W. J. Lewis - - - - - - - - -	29	2	6
	R. H. Robertson - - - - - - - -	24	5	5
	R. Semple - - - - - - - - -	24	5	5
	J. H. Sterry - - - - - - - - -	24	5	5
	N. B. Ward - - - - - - - - -	24	5	5
	R. Wade - - - - - - - - -	24	5	5
	G. Cooper - - - - - - - - -	24	5	5
	C. A. Aikin - - - - - - - - -	24	5	5
	W. J. Gaye - - - - - - - - -	24	5	5

(*continued*)

1848-49—EXPENSA—*continued.*

		£.	s.	d.
1849:				
June - - 24	W. H. Freeman	24	5	5
	Nowell Stowers	24	5	5
	Erasmus Wren	24	5	5
	Stamps for receipts	1	1	–
	Surrey Chapel	10	10	–
	Brettell	21	11	–
	Worsfold	5	–	9
	Clark	45	10	6
	Bevan	8	8	–
	Boothby	3	10	10
	Mitchell	8	6	9
	Utton, 13 weeks	13	–	–
	Paving-rate	3	7	1
	Water-rate	2	8	–
	Disbursements by Inspector	25	4	11
	G. M. Leese	24	5	5
		2,004	10	7
	Balance	528	15	1
	£.	2,533	5	8

AUDIT, 9 July 1849.

The Balance of this Account is Five hundred and Twenty-eight pounds Fifteen shillings and One penny.

John Ayrton Paris.
Edward Stanley.
H. H. Southey.
C. Hue, Registrar.

1849-50.

ACCEPTA.

		£.	s.	d.
1849:				
July - - -	Balance	528	15	1
October - 12	Parliamentary grant £. 2,000 – –			
	Property-tax deducted 45 4 2			
		1,954	15	10
	Cheque in advance returned	30	–	–
	£.	2,513	10	11

EXPENSA.

		£.	s.	d.
July - -	In advance to Inspector	10	–	–
October - 8	Further advance to Inspector	20	–	–
	Assessed taxes	9	17	4
	Poor's-rate	6	10	–
	Utton, 13 weeks	13	–	–
	Disbursements by Inspector	4	12	8
„ - - 12	Stamp for receipt of grant	–	10	–
„ - - 20	Miss Grant	55	16	3
1850:				
January - -	Brettell (printer)	20	2	6
	Worsfold (stationer)	5	14	–
	Clark (points)	54	7	–
	Bevan (coals)	7	16	–
	Mitchell (glass)	7	18	6
	Boothby (bell-hanger)	2	3	6
	Mansfield (builder)	44	3	–
	Utton, 14 weeks	14	–	–
	Paving-rate	2	17	6
	Water-rate	2	8	–
	Disbursements by Inspector	12	14	6
	Dr. Hue, Registrar	97	1	8
	J. N. Tomkins, Esq., Inspector	97	1	8
	G. Simpson	48	10	10
	F. Ager	24	5	5
	A. Buchanan	24	5	5
	W. J. Lewis	29	2	6
	R. H. Robertson	24	5	5
	R. Semple	24	5	5

1849–50—Expensa—*continued.*

1850:		£.	s.	d.
January	J. H. Sterry	24	5	5
	N. B. Ward	24	5	5
	R. Wade	24	5	5
	G. Cooper	24	5	5
	C. A. Aikin	24	5	5
	W. J. Gaye	24	5	5
	W. H. Freeman	24	5	5
	Nowell Stowers	24	5	5
	Erasmus Wren	24	5	5
	G. M. Leese	24	5	5
	Stamps for vaccinators	–	17	6
April 1	Utton, eleven weeks	11	–	–
	Assessed taxes	8	2	4
	Property-tax	1	15	–
	Disbursements by Inspector	5	–	–
	Poor's-rate	5	12	8
„ 18	Miss Grant	55	16	6
June	Stamps for receipts	1	2	–
	Dr. Hue, Registrar	97	1	8
	N. B. Tomkins, Esq., Inspector	97	1	8
	Dr. Paris, President	97	1	8
	J. H. Green, Esq., President of Royal College of Surgeons	97	1	8
	Dr. Southey, Censor	97	1	8
	G. Simpson, Esq.	48	10	10
	F. Ager, Esq.	24	5	5
	A. Buchanan, Esq.	24	5	5
	W. J. Lewis, Esq.	29	2	6
	R. H. Robertson, Esq.	24	5	5
	R. Semple, Esq.	24	5	5
	J. H. Sterry, Esq.	24	5	5
	N. B. Ward, Esq.	24	5	5
	R. Wade, Esq.	24	5	5
	G. Cooper, Esq.	24	5	5
	C. A. Aikin, Esq.	24	5	5
	W. J. Gaye, Esq.	24	5	5
	W. H. Freeman, Esq.	24	5	5
	Nowell Stowers, Esq.	24	5	5
	Erasmus Wren, Esq.	24	5	5
	G. M. Leese, Esq.	24	5	5
	Brettell	26	14	6
	Worsfold	5	4	–
	Clarke	54	3	–
	Bevan	9	–	–
	Mitchell	8	4	3
	Boothby	1	4	6
	Surrey Chapel	10	10	–
	Disbursements by Inspector	10	4	11
	Utton, 14 weeks	14	–	–
	Paving-rate	3	7	1
	Water-rate	2	8	–
		2,043	7	–
	Balance	470	3	11
	£.	2,513	10	11

Audit, 8 July 1850.

The Balance of this Account is Four hundred and Seventy pounds Three shillings and Eleven-pence.

J. A. Paris, President.
Joseph Henry Green.
Thomas Mayo, Censor.
C. Hue, Registrar.

1850–51.

		£.	s.	d.
1850:	**ACCEPTA.**			
July - 8	Balance	470	3	11
October - 9	Parliamentary Grant £.2,000 – –			
	Property-tax deducted 45 4 2			
		1,954	15	10
	Cheque in advance returned	30	–	–
	£.	2,454	19	9
	EXPENSA.			
July - 8	Cash in advance to Inspector	30	–	–
October - 1	Disbursements by Inspector	6	7	4
	Utton, 12 weeks	12	–	–
	Assessed taxes	8	2	4
	— —	1	15	–
	Poor's-rate	4	15	4
	Stamp for receipt of grant	–	10	–
November - 5	Miss Grant	55	16	–
December - 31	Dr. Hue, Registrar	97	1	8
	J. N. Tomkins, Esq., Inspector	97	1	8
	G Simpson, Esq.	48	10	10
	W. J. Lewis, Esq.	29	2	6
	F. Ager, Esq.	24	5	5
	A. Buchanan, Esq.	24	5	5
	R. H. Robertson, Esq.	24	5	5
	R. Semple, Esq.	24	5	5
	J. H. Sterry, Esq.	24	5	5
	N. B. Ward, Esq.	24	5	5
	R. Wade, Esq.	24	5	5
	G. Cooper, Esq.	24	5	5
	C. A. Aikin, Esq.	24	5	5
	W. J. Gaye, Esq.	24	5	5
	W. H. Freeman, Esq.	24	5	5
	Nowell Stowers, Esq.	24	5	5
	Erasmus Wren, Esq.	24	5	5
	G. M. Leese, Esq.	24	5	5
	Stamps for vaccinators	–	17	6
	Brettell	16	16	–
	Clarke	45	5	6
	Mansfield	11	2	–
	Boothby	5	18	–
	Worsfold	4	3	–
	Bevan	7	10	–
	Mitchell (executors)	11	17	6
	Disbursements by Inspector	11	12	6
	Paving-rate	2	17	6
	Water-rate	2	8	–
	Sewers-rate	2	12	–
	Utton, 15 weeks	15	–	–
1851:				
January - 27	Pullham, for boards	1	19	3
March - 31	Disbursements by Inspector	6	16	–
	Utton, 11 weeks	11	–	–
	Poor's-rate	4	6	8
	Assessed taxes	9	17	4
April - 10	Miss Grant	55	16	–
„ - 14	Mitchell (*N.B.*—Paid executors, as above).	—		
	Dr. Paris, President	97	1	8
	J. M. Arnott, Esq., President of Royal College of Surgeons	97	1	8
	Dr. Mayo, Senior Censor	97	1	8
	Dr. Hue, Registrar	97	1	8
	J. N. Tomkins, Esq., Inspector	97	1	8
	G. Simpson, Esq.	48	10	10
	F. Ager, Esq.	24	5	5
	C. A. Aikin, Esq.	24	5	5
	A. Buchanan, Esq.	24	5	5
	G. Cooper, Esq.	24	5	5
	W. H. Freeman, Esq.	24	5	5
	W. J. Gaye, Esq.	24	5	5

1850-51.—EXPENSA—*continued.*

1851:		£.	s.	d.
April - - 14	G. M. Leese, Esq. - - - - - - - - -	24	5	5
	W. J. Lewis, Esq. - - - - - - - - -	29	2	6
	R. H. Robertson, Esq. - - - - - - - -	24	5	5
	R. Semple, Esq. - - - - - - - - -	24	5	5
	J. H. Sterry, Esq. - - - - - - - - -	24	5	5
	Nowell Stowers, Esq. - - - - - - - -	24	5	5
	R. Wade, Esq. - - - - - - - - -	24	5	5
	N. B. Ward, Esq. - - - - - - - - -	24	5	5
	Erasmus Wren, Esq. - - - - - - - -	24	5	5
	Bevan (coals) - - - - - - - - -	7	16	–
	Surrey Chapel School - - - - - - - -	10	10	–
	Utton, 15 weeks - - - - - - - - -	15	–	–
	Water-rate - - - - - - - - - -	2	8	–
	Paving-rate - - - - - - - - - -	3	7	1
	Stamps for Vaccinators - - - - - - - -	1	2	–
	Disbursements by Inspector - - - - - - -	9	4	11
	Brettell - - - - - - - - - - -	29	19	8
	Clarke - - - - - - - - - - -	58	13	–
	Worsfold - - - - - - - - - - -	5	4	6
	Boothby - - - - - - - - - - -	5	8	6
	Brown (late Mitchell) - - - - - - - - -	5	13	10
		2,015	18	3
	Balance - - - -	439	1	6
	£.	2,454	19	9

AUDIT, 14 July 1851.

The Balance of this Account is Four hundred and Thirty-nine pounds One shilling and Sixpence.

J. A. Paris, President.
John H. South.
James Arthur Wilson.
C. Hue, Registrar.

1851-52.

1851:	ACCEPTA.	£.	s.	d.
July - - 14	Balance - - - - - - - - - -	439	1	6
October - 15	Parliamentary Grant - - - - £. 2,000 – –			
	Deduct Property-tax - - - 45 4 2			
		1,954	15	10
		2,393	17	4
	Cheque in advance returned - - - - - -	30	–	–
	£.	2,423	17	4

	EXPENSA.			
July - - 14	Cash in advance to Inspector - - - - - -	30	–	–
	Disbursement by Inspector - - - - - -	7	16	–
	Utton, Messenger, 11 weeks - - - - - -	11	–	–
	Poor-rates - - - - - - - - -	5	4	–
October - 15	Stamp for Treasury - - - - - - - -	–	10	–
„ - 23	Miss Grant - - - - - - - - -	55	16	–
December - 25	Dr. Hue, Registrar - - - - - - -	97	1	8
	J. N. Tomkins, Esq., Inspector - - - - -	97	1	8
	G. Simpson - - - - - - - - -	48	10	10
	F. Ager - - - - - - - - -	24	5	5
	C. A. Aikin - - - - - - - - -	24	5	5
	A. Buchanan - - - - - - - - -	24	5	5
	G. Cooper - - - - - - - - -	24	5	5
	W. H. Freeman - - - - - - - - -	24	5	5
	W. H. Gaye - - - - - - - - -	24	5	5
	G. M. Leese - - - - - - - - -	24	5	5
	W. J. Lewis - - - - - - - - -	29	2	6
	R. H. Robertson - - - - - - - -	24	5	5
	R. Semple - - - - - - - - -	24	5	5
	J. H. Sterry - - - - - - - - -	24	5	5
	Nowell Stowers - - - - - - - -	24	5	5
	R. Wade - - - - - - - - -	24	5	5
	N. B. Ward - - - - - - - - -	24	5	5
	Erasmus Wren - - - - - - - -	24	5	5

1851–52—EXPENSA—*continued.*

		£.	s.	d.
1851:				
December - 25	Stamps for Vaccinators	–	17	6
	Disbursements by Inspector	14	15	8
	Utton, Messenger, 15 weeks	15	–	–
	Water-rate	2	8	–
	Assessed taxes	1	18	4
	Brettell	29	–	–
	Clarke	58	18	6
	Bevan	7	10	–
	Worsfold	4	17	–
	Boothby	5	10	–
	Mansfield	10	10	6
	Brown (glass)	9	14	6
1852:				
March - 29	Utton, Messenger, 11 weeks	11	–	–
	Poor-rate, 5*l.* 4*s.*; paving-rate, 2*l.* 17*s.* 6*d.*; house-duty, 2*l.* 3*s.* 2*d.*	10	4	8
April - - -	Disbursements by Inspector	8	4	2
	Miss Grant	55	16	6
	Stamps for Vaccinators	1	2	–
June - - 25	Dr. Paris, President	97	1	8
	Dr. James Arthur Wilson, Censor	97	1	8
	John Flint South, Esq., President of Royal College of Surgeons	97	1	8
	Dr. Hue, Registrar and Honorary Treasurer	97	1	8
	J. N. Tomkins, Esq., Inspector	97	1	8
	G. Simpson, Esq.	48	10	10
	C. A. Aikin, Esq.	24	5	5
	A. Buchanan	24	5	5
	G. Cooper	24	5	5
	Leopold B. Fox	24	5	5
	W. H. Freeman	24	5	5
	W. J. Gaye	24	5	5
	G. M. Leese	24	5	5
	W. J. Lewis	29	2	6
	R. H. Robertson	24	5	5
	J. H. Sterry	24	5	5
	Nowell Stowers	24	5	5
	R. Wade	24	5	5
	N. B. Ward	24	5	5
	Erasmus Wren	24	5	5
July - - 12	John Rose	24	5	5
	Brettell	28	9	6
	Clarke	63	5	6
	Brown	12	1	8
	Boothby	21	13	10
	Worsfold	4	15	–
	Bevan	7	10	–
	Surrey Chapel School-room	10	10	–
	Utton, Messenger	15	–	–
	Assessed and House taxes	7	8	8
	Paving-rate	3	7	1
	Water-rate	2	8	–
	Disbursements by Inspector	8	6	3
		2,056	18	10
	Balance	366	18	6
	£.	2,423	17	4

AUDIT, 2 August 1852.

The Balance of this Account is Three hundred and Sixty-six pounds Eighteen shillings and Six-pence.

John Ayrton Paris.
Cæsar H. Hawkins.
R. B. Todd.
C. Hue, Registrar.

1852–53.

	ACCEPTA.	£.	s.	d.
1852:	Balance	366	18	6
	Parliamentary Grant £. 2,000 – –			
	Deduct Property-tax 45 4 2			
		1,954	15	10
		2,321	14	4
	Cash in advance to Inspector returned	30	–	–
	£.	2,351	14	4

	EXPENSA.	£.	s.	d.
	Cash in advance to Inspector	30	–	–
	Disbursements by Inspector	8	–	11
	Utton, 13 weeks	13	–	–
	Poor's-rate	5	4	–
	Assessed taxes	4	1	6
	Ditto	1	13	7
	Miss Grant	55	16	6
	The Registrar	97	1	8
	J. N. Tomkins, Esq., Inspector	97	1	8
	G. Simpson, Esq.	48	10	10
	C. A. Aikin, Esq.	24	5	5
	A. Buchanan, Esq.	24	5	5
	G. Cooper, Esq.	24	5	5
	Leopold B. Fox, Esq.	24	5	5
	W. H. Freeman, Esq.	24	5	5
	W. J. Gaye, Esq.	24	5	5
	G. M. Leese, Esq.	24	5	5
	W. J. Lewis, Esq.	29	2	6
	R. H. Robertson, Esq.	24	5	5
	J. Rose, Esq.	24	5	5
	J. H. Sterry, Esq.	24	5	5
	N. Stowers, Esq.	24	5	5
	R. Wade, Esq.	24	5	5
	N. B. Ward, Esq.	24	5	5
	E. Wren, Esq.	24	5	5
	Disbursements by Inspector	14	–	–
	Sewers-rate	2	12	–
	Water-rate	2	8	–
	Utton, 13 weeks	13	–	–
	Brettell	22	12	6
	Clarke	58	15	–
	Bevan	7	10	–
	Brown	9	18	9
	Boothby	6	–	6
	Worsfold	5	–	6
	Mansfield	4	6	–
	Stamps for Vaccinators	–	17	6
	Stamp for Treasury	–	10	–
	Mr. Fox, for brass plate	1	5	–
1853:				
March	Disbursements by Inspector	8	3	5
	Poor's-rate	5	4	–
	Paving-rate	2	17	6
	Assessed taxes	4	1	6
	Ditto	1	13	7
April 11	Miss Grant	55	16	6
	Utton, 11 weeks	11	–	–
	Dr. Paris, President	97	1	8
	Dr. Todd, Censor	97	1	8
	Cæsar Hawkins, Esq., President of Royal College of Surgeons	97	1	8
	Dr. Hue, Registrar	97	1	8
	J. N. Tomkins, Esq., Inspector	97	1	8
	G. Simpson, Esq.	48	10	10
	C. A. Aikin, Esq.	24	5	5
	A. Buchanan, Esq.	24	5	5
	G. Cooper, Esq.	24	5	5
	Leopold B. Fox, Esq.	24	5	5
	W. H. Freeman, Esq.	24	5	5
	W. J. Gaye, Esq.	24	5	5
	G. M. Leese, Esq.	24	5	5
	W. J. Lewis, Esq.	29	2	6

(*continued*)

1852–53—EXPENSA—*continued.*

1853:		£.	s.	d.
April - - 11	R. H. Robertson, Esq.	24	5	5
	J. Rose, Esq.	24	5	5
	J. H. Sterry, Esq.	24	5	5
	N. Stowers, Esq.	24	5	5
	R. Wade, Esq.	24	5	5
	N. B. Ward, Esq.	24	5	5
	E. Wren, Esq.	24	5	5
	Stamps	1	2	–
	Brettell	24	11	–
	Clark	67	14	6
	Brown	12	17	6
	Boothby	4	10	–
	Bevan	7	16	–
	Edwards (late Worsfold)	5	10	6
	Surrey Chapel	10	10	–
	Disbursements by Inspector	9	19	–
	Utton, 14 weeks	14	–	–
	Water-rate	1	4	–
		2,029	13	3
	Balance	322	1	1
	£.	2,351	14	4

AUDIT, 18 July 1853.

The Balance of this Account is Three hundred and Twenty-two pounds One shilling and One penny.

J. A. Paris, President.
James Luke, President R. C. of Surgeons.
Robert Nairne, Senior Censor.
C. Hue, Registrar.

1853–54.

1853:	ACCEPTA.	£.	s.	d.
July - 18	Balance at Audit	322	1	1
September 16	Parliamentary Grant £.2,000 – –			
	Deduct Property-tax 45 4 2			
		1,954	15	10
		2,276	16	11
	Cash advanced to Inspector returned	30	–	–
	£.	2,306	16	11

	EXPENSA.			
July - - -	Cash in advance to Inspector	30	–	–
September - 16	Stamp for Parliamentary Grant	–	10	–
October - 3	Utton, Messenger, 13 weeks	13	–	–
	Petty cash and rates: poor, 5 *l.* 4 *s.*; assess, 4 *l.* 1 *s.* 7 *d.*; paving, 3 *l.* 7 *s.* 1 *d.*	21	–	–
November - 1	Miss Grant's rent	48	10	10
1854:				
January - -	The Registrar	97	1	8
	The Inspector	97	1	8
	Simpson	48	10	10
	Aikin	24	5	5
	Buchanan	24	5	5
	Cooper	24	5	5
	Fox	24	5	5
	Freeman	24	5	5
	Gaye	24	5	5
	Leese	24	5	5
	Lewis	29	2	6
	Robertson	24	5	5
	Rose	24	5	5
	Sterry	24	5	5

1853–54—Expensa—*continued.*

1854:		£.	s.	d.
January	Stowers	24	5	5
	Wade	24	5	5
	Ward	24	5	5
	Wren	24	5	5
	Utton, Messenger, 14 weeks	14	–	–
	Water-rate	2	8	–
	Sewers-rate	2	12	–
	Disbursements by Inspector	15	10	–
	Brettell	33	6	6
	Clarke	81	–	–
	Browne	11	4	6
	Boothby	4	18	6
	Bevan	7	16	–
	Edwards	5	14	–
	Mansfield	2	10	6
March 26	Utton, Messenger	11	–	–
	Paving rate, 2*l.* 17*s.* 6*d.*; poor's rate, 5*l.* 12*s.* 8*d.*; assessed taxes, 6*l.* 9*s.* 10*d.*	15	10	–
	Disbursements by Inspector	8	17	–
	Miss Grant's rent	48	10	10
	C. Hue, Registrar	95	12	6
	J. N. Tomkins, Inspector	95	12	6
	Dr. Paris, President	96	7	1
	James Luke, Esq., President of Royal College of Surgeons	96	7	1
	Dr. Nairne	96	7	1
	G. Simpson	47	16	3
	Aikin	23	18	1½
	Buchanan	23	18	1½
	Cooper	23	18	1½
	Fox	23	18	1½
	Freeman	23	18	1½
	Gaye	23	18	1½
	Leese	23	18	1½
	Lewis	29	1	–½
	Robertson	23	18	1½
	Rose	23	18	1½
	Sterry	23	18	1½
	Stowers	23	18	1½
	Wade	23	18	1½
	Ward	23	18	1½
	Wren	23	18	1½
	Brettell	25	13	6
	Clarke	63	3	–
	Brown	12	17	6
	Boothby	4	18	6
	Bevan	12	4	–
	Edwards	5	15	6
	Surrey Chapel	10	10	–
	Disbursements by Inspector	10	2	–
	Utton, 14 weeks	14	–	–
	Water-rate	2	8	–
	Stamps	–	13	1
		2,043	13	6½
	Balance	263	3	4½
	£.	2,306	16	11

Audit, 9 October 1854.

The Balance of this Account is Two hundred and Sixty-three pounds Three shillings and Four-pence.

J. A. Paris, President.
G. J. Guthrie, President of R. Coll. of Surgeons.
Fred. J. Farre.
C. Hue, Registrar.

1854–55.

		£.	s.	d.
1854:	**ACCEPTA.**			
	Balance at Audit	263	3	4½
September 8	Parliamentary Grant £. 2,210 – –			
	Property Tax deducted 56 10 3			
		2,153	9	9
	Cash advanced to Inspector returned	30	–	–
	£.	2,446	13	1½
	EXPENSA.			
	Cash in advance to Inspector	30	–	–
	Cheque to J. N. Tomkins, Esq., for furniture	50	–	–
October 9	Cheque for Petty Cash Account	8	11	1
	Utton, Messenger, 13 weeks	13	–	–
	Paving, &c., 3*l.* 7*s.* 1*d.*; poor-rate, 6*l.* 10*s.*	9	17	1
„ 17	Miss Grant's half-year's rent	47	1	8
	C. Hue, Registrar	94	3	4
	J. N. Tomkins, Esq., Inspector	94	3	4
	G. Simpson	47	1	8
	Aikin	23	10	10
	Buchanan	23	10	10
	Cooper	23	10	10
	Fox	23	10	10
	Freeman	23	10	10
	Gaye	23	10	10
	Leese	23	10	10
	Lewis	28	10	10
	Robertson	23	10	10
	Rose	23	10	10
	Sterry	23	10	10
	Stowers	23	10	10
	Wade	23	10	10
	Ward	23	10	10
	Wren	23	10	10
	Inspector's expenses	14	6	–
	Utton, Messenger, 13 weeks	13	–	–
	Assessed taxes	6	12	–
	Water-rate, 2*l.* 8*s.*; sweep, 2*s.*	2	10	–
	Brettell	19	9	6
	Clark	54	4	6
	Brown	12	13	–
	Boothby	12	–	–
	Bevan	9	–	–
	Edwards	4	3	–
	Cheque for extra furniture to J. N. Tomkins, Inspector	10	5	–
	Mansfield & Son	150	2	7
	Stamps	–	1	5
1855:				
April 2	Utton, Messenger, 13 weeks	13	–	–
	Paving-rate, 2*l.* 17*s.* 6*d.*; sewers-rate, 2*l.* 12*s.*	5	9	6
	Poor's-rate	6	18	8
	Petty Cash Account	9	11	10
„ 12	Miss Grant's half-year's rent	47	1	8
	Dr. Paris, President	93	19	2
	G. J. Guthrie, Esq., President of Royal College of Surgeons	93	19	2
	Dr. Farre, Censor	93	19	2
	C. Hue, Registrar	93	15	–
	J. N. Tomkins, Inspector	93	15	–
	G. Simpson	46	17	6
	Aikin	23	8	9
	Buchanan	23	8	9
	Cooper	23	8	9
	Fox	23	8	9
	Freeman	23	8	9
	Gaye	23	8	9
	Leese	23	8	9
	Lewis	28	8	9
	Robertson	23	8	9
	Rose	23	8	9
	Sterry	23	8	9

1854-55.—EXPENSA—*continued.*

1855:		£.	s.	d.
April - - 12	Stowers - - - - - - - - - - -	23	8	9
	Wade - - - - - - - - - - -	23	8	9
	Ward - - - - - - - - - - -	23	8	9
	Wren - - - - - - - - - - -	23	8	9
	Brettell - - - - - - - - - - -	28	8	6
	Brown - - - - - - - - - - -	14	13	6
	Boothby - - - - - - - - - - -	4	15	6
	Bevan - - - - - - - - - - -	8	14	–
	Clarke - - - - - - - - - - -	63	–	–
	Edwards - - - - - - - - - - -	4	19	–
	Surrey Chapel - - - - - - - - - -	10	10	–
	Disbursements by Inspector - - - - - - -	9	10	–
	Utton, 13 weeks - - - - - - - - -	13	–	–
	Stamps - - - - - - - - - - -	–	1	8
	Assessed taxes - - - - - - - - - -	3	13	8½
	Income tax - - - - - - - - - - -	2	18	4
	Water-rate - - - - - - - - - - -	2	8	–
		2,181	17	9½
	Balance - - -	264	15	4
	£.	2,446	13	1½

Audit, 20 August 1855.

The Balance of this Account is Two hundred and Sixty-four Pounds Fifteen shillings and Four-pence.

John Ayrton Paris.
Wm. Lawrence.
W. E. Page.
C. Hue, Registrar.

Clement Hue, M. D.,
Registrar and Honorary Treasurer.

VACCINATION.

RETURN of the Sums voted for the National Vaccine Institution since 1833, and the Appropriation, in detail, of such Sums.

(*Mr. Thomas Duncombe.*)

Ordered, by The House of Commons, *to be Printed,*
8 *April* 1856.

Under 8 *oz.*

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LUNATICS.

RETURN to an Address of the Honourable The House of Commons, dated 3 April 1856;—*for*,

"RETURNS of the Total Number of LUNATICS in respect of whom COMMISSIONS of LUNACY are now in force, and of the Total Amount of their Annual Incomes, and the Total Amount of the Sums allowed for their Maintenance:"

"For each Year, from 1850 to 1855 inclusive, of the Number of LUNATICS in respect of whom COMMISSIONS issued; distinguishing those in respect of whom Commissions are now in force:"

"Of the Total Amount of their ANNUAL INCOMES, and the Total Amount of the same allowed for their Maintenance; distinguishing the Number of Persons, and Amount of Income, and the Allowance for Maintenance of those who have individually less than 100 *l.* per annum; those who have more than 100 *l.* and less than 200 *l.* per annum; those who have more than 200 *l.* and less than 400 *l.* per annum; those who have more than 400 *l.* and less than 600 *l.* per annum; those who have more than 600 *l.* and less than 1,000 *l.* per annum; and those who have more than 1,000 *l.* per annum; with the Amount of their Income (in continuation of Parliamentary Paper, No. 505, of Session 1851):"

"Of the Amounts of PER-CENTAGE paid in each Year, from the 8th day of January 1849 to the 8th day of January 1856, on LUNATICS' INCOMES, and of the Payments made thereon in each Year during the same Period, under the Provisions of the Act 3 & 4 Will. 4, c. 36 (in continuation of Parliamentary Paper, No. 508, of Session 1851):"

"And, of the Number of CRIMINAL LUNATICS now under CONFINEMENT; specifying the Name and Sex of each Person, the Place of Confinement, whether in Lunatic Asylums, Licensed Houses or Gaols; the Nature of the Offence committed, and the Period at which the Confinement commenced (in continuation of Parliamentary Paper, No. 195, of Session 1844)."

(*Mr. Tite.*)

Ordered, by The House of Commons, *to be Printed*,
26 *May* 1856.

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RETURN showing the Number of LUNATICS in respect of whom COMMISSIONS of LUNACY are now in force;—Total Amount of Incomes;—Total Amount of Sums allowed for their Maintenance;—for each Year from 1850 to 1855 inclusive, of the Number of Lunatics in respect of whom Commissions issued; distinguishing those in respect of whom Commissions are in force;—Amount of Income; Allowance for Maintenance according to Scales of Income.

		INCOME.	MAINTENANCE.
		£. s. d.	£. s. d.
There are 551 lunatics in respect of whom commissions of lunacy are now in force.			
The incomes of 46 of these lunatics have not yet been ascertained, nor the allowance for maintenance fixed, chiefly by reason of the recent date of the commissions.			
The total incomes of the remaining 505 of such lunatics, amount to		238,188 – –	
The total of the sums allowed for their maintenance, amounts to		– – –	160,163 – –
The number of lunatics in respect of whom commissions issued			
In 1850 was – – – –	39		
In 1851 was – – – –	37		
In 1852 was – – – –	43		
In 1853 was – – – –	34		
In 1854 was – – – –	78		
In 1855 was – – – –	60		
	291		
(Of these 291 commissions, 240 are now in force.)			
Of the above 505 lunatics, there are—			
127 who individually have less than 100 *l.* per annum, and whose incomes together amount to		7,700 – –	
And the total of the sums allowed for their maintenance, to		– – –	7,460 – –
129 who individually have more than 100 *l.* and less than 200 *l.* per annum, and whose incomes together amount to		19,165 – –	
And the total of the sums allowed for their maintenance, to		– – –	16,964 – –
100 who individually have more than 200 *l.* and less than 400 *l.* per annum, and whose incomes together amount to		27,501 – –	
And the total of the sums allowed for their maintenance, to		– – –	23,326 – –
58 who individually have more than 400 *l.* and less than 600 *l.* per annum, and whose incomes together amount to		27,899 – –	
And the total of the sums allowed for their maintenance, to		– – –	22,419 – –
40 who individually have more than 600 *l.* and less than 1,000 *l.* per annum, and whose incomes together amount to		30,115 – –	
And the total of the sums allowed for their maintenance, to		– – –	21,914 – –
51 who individually have more than 1,000 *l.* per annum, and whose incomes together amount to		125,808 – –	
And the total of the sums allowed for their maintenance, to		– – –	68,080 – –
And in addition there are 46 lunatics whose incomes have not yet been ascertained, nor the allowances for their maintenance fixed, chiefly on account of the recent date of the commissions in such cases.			
551	£.	238,188 – –	160,163 – –

2 May 1856.

(signed) *Charles N. Wilde*,
Registrar in Lunacy.

RETURN

RETURN of the Amounts of Per-Centage paid in each Year, from the 8th day of January 1849 to the 8th day of January 1856, on Lunatics' Incomes, and of the Payments made thereon in each Year during the same Period, under the Provisions of the Act 3 & 4 Will. 4, c. 36.

Amount of Per-Centage of One per Cent. on the Incomes of Lunatics received by the Bank of England, with the privity of the Accountant- General of the Court of Chancery, to "The Account of the Board of Visitors, for the better Care and Treatment of Lunatics," under the provisions of the said Act, viz.:

	£.	s.	d.
From 8 January 1849 to 8 January 1850 - - - -	3,640	16	7
From 8 January 1850 to 8 January 1851 - - - -	4,477	5	6
From 8 January 1851 to 8 January 1852 - - - -	3,097	19	3
From 8 January 1852 to 8 January 1853 - - - -	3,828	8	2

The foregoing particulars were included in a Return dated 8 April 1853, made pursuant to an Order of The House, dated the 28th February 1853.

Further Receipts in respect of such Per-Centage.

	£.	s.	d.
From 8 January 1853 to 2 December 1853, when, pursuant to the Lunacy Regulation Act, 1853, the said account under the said Act of 3 & 4 Will. 4, c. 36, was closed, and the balance remaining thereon was carried over by the Accountant-General to the credit of the Suitors' Fee Fund Account of the Court of Chancery, as stated in the payments below - - - - -	2,887	7	4

Payments made out of the said Per-Centage during the same Period.

	£.	s.	d.
From 8 January 1849 to 8 January 1850 - - - -	2,776	4	–
From 8 January 1850 to 8 January 1851 - - - -	2,786	4	–
From 8 January 1851 to 8 January 1852 - - - -	3,359	–	–
From 8 January 1852 to 8 January 1853 - - - -	2,734	12	–

Note.—In addition to the above payments the sum of 3,872 *l.* 13 *s.* 6 *d.* was, on the 28th June 1852, pursuant to an order of the Lord Chancellor, transferred from the said Per-Centage Account to the said Suitors' Fee Fund Account, in re-payment of a like amount (being the aggregate of several sums) paid to the credit of the said Per-Centage Account in respect of surplus fees taken in the office of the Secretary for Lunatics. This item of expense was explained in the Return of that period.

The foregoing particulars were included in the said Return, dated 8 April 1853.

Further Payments made out of the said Per-Centage.

	£.	s.	d.
From 8th January 1853 to the 2d December 1853, when the said Per-Centage Account was closed, as hereinbefore mentioned - - - - - -	3,067	18	–
December 1853: Balance remaining on the said Per-Centage account, and carried over to the credit of the said "Suitors' Fee Fund" Account, as hereinbefore mentioned - - - - - - - - - - - - - -	2,194	8	9

By the provisions of the Lunacy Regulation Act, 1853, the payments into the Bank of England of the per-centage to the account of the Board of Visitors of Lunatics were discontinued, and a graduated payment on the incomes of lunatics, and certain fees, were made payable, in order to defray the charges incident to the administration in lunacy. The amounts so raised are, pursuant to the same Act, paid into the Suitors' Fee Fund Account of the Court of Chancery, and all the expenses of the lunacy administration are paid thereout.

It was, by the said Lunacy Regulation Act, 1853, further directed, that any sums, in respect of per-centage under the Act 3 & 4 Will. 4, c. 36, remaining unpaid after the said Per-Centage Account should be closed, should be paid into the said Suitors' Fee Fund account.

	£.	s.	d.
Amount of payments into the Suitors' Fee Fund Account of the Court of Chancery of sums of per-centage, under the Act of 3 & 4 Will. 4, c. 36, after the said per-centage account was closed as aforesaid - - - - - -	3,939	19	9

H. Enfield,
30 April 1856. Secretary to the Visitors of Lunatics.

RETURN of the Number of CRIMINAL LUNATICS now under CONFINEMENT; specifying the Name and Sex of each Person; the Place of Confinement, whether in Lunatic Asylums, Licensed Houses, or Gaols; the Nature of the Offence committed; and the Period at which the Confinement commenced.

NAMES.	SEX. M.	SEX. F.	Place of Confinement.	Nature of the Offence Committed.	When Confinement Commenced.
Mary Young	–	1	Bucks County Asylum	stealing a jacket	17 Aug. 1848
Thomas Swift	1	–	- - ditto	murder	30 May 1839
Thomas Newton	1	–	- - ditto	- - threatening the life of the surgeon who amputated his leg.	10 Jan. 1848
Elijah Wellings	1	–	- - ditto	sheep stealing	29 May 1855
James Sloane*	1	–	- - ditto	stealing penknives	15 Dec. 1853
Peter McGuiness	1	–	Cheshire County Asylum	murder	3 Aug. 1835
James Furber	1	–	- - ditto	larceny	7 July 1840
Anthony Conway	1	–	- - ditto	assault	18 Sept. –
John Sale	1	–	- - ditto	arson	15 Oct. –
Michael Towkey	1	–	- - ditto	assault	8 Nov. 1841
John Livesley	1	–	- - ditto	arson	19 Oct. 1842
James Radford	1	–	- - ditto	ditto	29 Dec. 1846
William Hudson	1	–	- - ditto	murder	10 July 1848
Richard Butler	1	–	- - ditto	burglary	3 Oct. 1849
James Hart, *alias* Healey	1	–	- - ditto	larceny	3 May 1851
Ann Ellson	–	1	- - ditto	breach of the peace	16 Mar. 1853
Elizabeth Cook	–	1	- - ditto	larceny	9 June 1854
Samuel Shaw	1	–	- - ditto	arson	22 July –
William Knowles	1	–	- - ditto	murder	27 Sept. –
John Ward	1	–	- - ditto	burglary	28 Jan. 1856
John Venables	1	–	- - ditto	breach of the peace	14 June 1855
Mary Martin	–	1	Cornwall County Asylum	- ditto	22 June 1837
John Tucker	1	–	- - ditto	stabbing	19 June 1844
John Mayell	1	–	- - ditto	breach of the peace	2 Sept. –
Christianna Gray	–	1	- - ditto	vagrancy	2 Dec. –
Sarah Gilbert	–	1	- - ditto	- ditto	20 June 1849
James Tregoning	1	–	- - ditto	housebreaking	22 May 1851
James Cheely	1	–	- - ditto	- - deserting a union, and stealing clothes.	21 June 1852
Mary Rogers	–	1	- - ditto	felony	20 Dec. 1853
William Williams, *alias* Morcom.	1	–	- - ditto	vagrancy	27 July 1855
Catherine Stevens	–	1	- - ditto	breach of the peace	10 Dec. –
William Bostock	1	–	Denbigh, &c., County Asylum	stealing a carpet bag	23 July 1853
William Jones	1	–	- - ditto	cutting and maiming	25 Nov. 1848
Thomas Jones	1	–	- - ditto	assault with intent to ravish	7 Dec. 1849
Lewis Williams	1	–	- - ditto	felony	29 Aug. –
Robert Williams	1	–	- - ditto	larceny	3 Feb. 1852
James King	1	–	Derby County Asylum	vagrancy	22 Feb. 1854
Frederick Wright	1	–	- - ditto	want of sureties	11 Mar. 1856
Thomas Harper	1	–	Devon County Asylum	murder	7 April 1846
John McGill	1	–	- - ditto	arson	24 Nov. 1849
Henry Hammett	1	–	- - ditto	indecent exposure	18 Nov. 1850
Robert Clapp	1	–	- - ditto	- - want of sureties to keep the peace.	14 Feb. 1851
Joseph French	1	–	- - ditto	cutting and maiming	8 July 1853
William Howard	1	–	- - ditto	- - default of sureties to keep the peace.	27 Aug. –
Richard Kent	1	–	- - ditto		2 Aug. 1854
John Knowland	1	–	- - ditto	- - default of paying a penalty for an assault.	2 Aug. –
William Bull	1	–	- - ditto	larceny	6 June 1855
Mary Holman	–	1	- - ditto	- ditto	17 Oct. –
Robert Handcock	1	–	- - ditto	murder	28 Jan. 1856
Henry Hill	1	–	- - ditto	- - default of sureties to keep the peace.	22 Mar. –
Samuel Hidon	1	–	Dorset County Asylum	vagrancy	9 Jan. 1854
Matthew Clapp	1	–	- - ditto	housebreaking	5 Aug. 1839
John Burgess	1	–	- - ditto	vagrancy	21 Nov. 1846
Charles Williams	1	–	- - ditto	stealing a pig	13 Sept. 1848
William Quinland	1	–	Essex County Asylum	assault	3 Aug. 1853
Charles McPhearson	1	–	- - ditto	vagrancy	12 Oct. 1844
John Jones	1	–	- - ditto	- - not stated in Secretary of State's warrant.	31 Dec. 1850
Thomas Moss	1	–	- - ditto	shooting with intent to kill	26 May 1851

* This patient made his escape from the asylum on the 10th September 1854, and has not since been heard of.

NAMES.	SEX.		Place of Confinement.	Nature of the Offence Committed.	When Confinement Commenced.
	M.	F.			
Henry Adams	1	–	Essex County Asylum	arson	31 May 1845
John White	1	–	- - ditto	vagrancy	1 Sept. 1849
Jane Osborne	1	–	- - ditto	breach of the peace	2 Aug. –
Elizabeth Cosh, or Allen	–	1	- - ditto	- ditto	7 Sept. 1855
William Bull	1	–	- - ditto	horse stealing	7 Sept. –
James Bridge	1	–	- - ditto	breach of the peace	26 Nov. –
George Harding	1	–	Gloucester County Asylum	larceny	10 Mar. 1847
Edward Bridgewater	1	–	- - ditto	stealing from person	24 Nov. –
Louis Bryant	1	–	- - ditto	- - - - -	10 June 1853
William Smith	1	–	- - ditto	larceny by servant	1 Aug. 1855
Josiah Barton	1	–	Hants County Asylum	breach of peace	8 Feb. 1853
George Cox	1	–	- - ditto	petty larceny	30 Jan. 1856
William Davis	1	–	- - ditto	manslaughter	26 Feb. 1843
Richard Durman	1	–	- - ditto	indecent exposure	6 Feb. 1850
John Haffernen	1	–	- - ditto	burglary	13 May 1853
Samuel Kimber	1	–	- - ditto	murder	Feb. 1843
James Pain	1	–	- - ditto	petty larceny	Nov. 1853
Patrick Roach	1	–	- - ditto	- ditto	26 Feb. –
Caroline Richards	–	1	- - ditto	misdemeanour	10 Jan. 1840
Patrick Kerner	1	–	Kent County Asylum	vagrancy	8 Aug. 1839
Isaac Brown	1	–	- - ditto	larceny	8 May 1840
Thomas Filmer	1	–	- - ditto	housebreaking	5 Aug. 1843
Patrick Dolan	1	–	- - ditto	vagrant	22 April 1844
Johanna Driscoll	–	1	- - ditto	wilful damage	4 May 1847
John Dooley	1	–	- - ditto	assault	11 Aug. –
John Dorrell	1	–	- - ditto	breach of the peace	18 May 1849
Amelia Georg[a] Snoswell	–	1	- - ditto	murder	17 April 1851
Robt. Thos. Moore	1	–	- - ditto	assault	16 Jan. 1852
Johannah Sulivan	–	1	- - ditto	breach of the peace	13 Dec. 1854
Thomas Collins	1	–	- - ditto	- ditto	31 May 1855
Anonymous	1	–	- - ditto	- - committed on suspicion of being a deserter from Foreign Legion.	5 Dec. –
William Defacy	1	–	- - ditto	desertion	1 Jan. 1856
Joseph Dennerly	1	–	- - Lancaster County Asylum (Lancaster Moor).	murder	27 July 1838
John Sarsfield	1	–	- - ditto	larceny	13 July 1842
John Wilkinson	1	–	- - ditto	rooting	27 Oct. –
Peter Whittle	1	–	- - ditto	murder	26 Dec. –
Richard Bennett	1	–	- - ditto	attempt to murder	16 Sept. 1845
John Kay	1	–	- - ditto	- - want of sureties in breach of peace.	13 April 1850
John Foster	1	–	- - ditto	- ditto	7 Dec. –
James Dwerryhouse	1	–	- - ditto	murder	14 Dec. 1852
Samuel Bolton	1	–	- - ditto	maliciously wounding	10 Sept. 1853
Matilda Stewart	–	1	- - ditto	larceny	30 Dec. 1841
Mary M'Dermott	–	1	- - ditto	stealing apparel	2 Dec. 1844
Sarah Thompson	–	1	- - ditto	larceny	26 Oct. 1846
Mary Ann Buller	–	1	- - ditto	attempt to murder	21 May –
Mary Marsden	–	1	- - ditto	felony	14 Sept. 1848
Elizabeth Cunliffe	–	1	- - Lancaster County Asylum (Rainhill).	murder	21 Dec. 1853
Ellen Wrigley	–	1	- - ditto	robbery with violence	22 Feb. 1854
Margaret Murray	–	1	- - ditto	assault	14 Aug. –
Robert Maxwell	1	–	- - ditto	- - offence against the Mercantile Marine Act.	2 April 1855
Thomas Armstrong	1	–	- - ditto	offence against game laws	13 April –
John Flinn	1	–	- - ditto	housebreaking	26 April –
George Whittaker	1	–	- - ditto	assault	20 Nov. –
John Thorpe	1	–	- - Lancaster County Asylum (Prestwich).	felony	7 April 1852
Hannah Morrison	–	1	- - ditto	illegally pawning a watch	20 Oct. 1853
Nancy Denton, or Dent	–	1	- - ditto	larceny	19 Nov. 1855
William Simpson	1	–	- - Leicester and Rutland County Asylum.	murder	29 July 1839
William Howe	1	–	- - ditto	arson	1 June 1842
Thomas Iliffe	1	–	- - ditto	- - not finding bail to keep the peace.	24 Jan. 1843
Samuel Brown	1	–	- - ditto	arson	10 Feb. 1845
Harriet Burbach	–	1	- - ditto	larceny	1 Nov. –
Robert Wildbore	1	–	- - ditto	rape	28 Sept. 1846
James Driver	1	–	- - ditto	not finding bail to keep the peace	2 June 1851
David Tester	1	–	- - ditto		21 July –
John Ainsworth	1	–	- - ditto	malicious cutting	19 Sept. –
Janet Monk	–	1	- - ditto	common assault	18 Oct. 1852
Solomon Moleburn	1	–	- - ditto	vagrancy	23 May 1853

NAMES.	SEX.		Place of Confinement.	Nature of the Offence Committed.	When Confinement Commenced.
	M.	F.			
Jessie Nicholson	–	1	Leicester and Rutland County Asylum.	larceny	20 June 1853
Thomas Brown	1	–	ditto	burglary	9 Nov. –
Thomas Bishop	1	–	ditto	attempt to commit an unnatural crime.	9 Mar. 1854
George Mountney	1	–	ditto	not finding bail to keep the peace.	16 May 1855
John Wells	1	–	ditto	arson	1 Aug. –
Luke Tinkler	1	–	ditto	larceny	10 Jan. 1856
John Mackman	1	–	Lincoln County Asylum	maliciously stabbing	6 Oct. 1843
Elizabeth Jessup	–	1	ditto	murder	27 Oct. 1847
Job Lound	1	–	ditto	larceny	7 Feb. 1849
Henry Cholmondeley, *alias* Christian.	1	–	ditto	stabbing	14 Sept. 1848
William Joseph Shiner	1	–	ditto	maliciously stabbing	11 July 1849
Thomas Holloway	1	–	ditto	rogue and vagabond	26 Aug. 1853
George Webb	1	–	ditto	vagrancy	26 Aug. –
Ann Watchorn	–	1	ditto	felony	19 Jan. 1855
John Happey	1	–	Middlesex County Asylum (Colney Hatch).	attempting to drown a person.	19 Mar. 1852
Unius Vickman	1	–	ditto	unknown	5 June –
William Worley	1	–	ditto	feloniously wounding	25 Sept. –
Benjamin Gibbs Mitchell	1	–	ditto	larceny	4 July 1853
Thomas Whitehead	1	–	ditto	assault upon the Earl of Aberdeen.	9 July –
Barnard Fitzpatrick	1	–	ditto	assault and wilful damage	27 June 1854
Richard Jeffrey	1	–	ditto	unknown	10 Nov. 1855
Thomas Gains	1	–	ditto	larceny	19 Nov. –
John Haggerty	1	–	ditto	burglary	22 Feb. 1856
Ellen Bennett	–	1	ditto	unknown	5 June 1852
Elizabeth Bunning	–	1	ditto	felony	14 April 1853
Thomas John Walker	1	–	ditto	larceny	17 May 1854
Margaret Dunn	–	1	Middlesex County Asylum (Hanwell).	ditto	16 June 1838
George Taplin	1	–	ditto	assault	2 Jan. 1840
Deborah Sarah Long Vickers	–	1	ditto	felony	28 Feb. 1843
Charles Voakes	1	–	ditto	larceny	15 Mar. –
George Williams	1	–	ditto	ditto	12 Sept. –
Eliza King	–	1	ditto	misbehaviour in a workhouse.	2 Jan. 1846
Rose Neal	–	1	ditto	larceny	24 May 1847
Jane Hawkes	–	1	ditto	not keeping the peace	7 Aug. –
Mary Ryan	–	1	ditto	larceny	6 Sept. –
Richard Prentice	1	–	ditto	not keeping the peace	4 April 1848
Sarah Batt	–	1	ditto	felony	13 Dec. 1852
Elizabeth Peddy or Pedder	–	1	ditto	ditto	10 Sept. 1853
Robert Fortescue	1	–	ditto	not keeping the peace	5 Sept. 1854
Margaret Furber	–	1	ditto	larceny	2 Oct. –
James Daley	1	–	ditto	not keeping the peace	4 Aug. 1855
Catherine Moulding	–	1	ditto	assault	15 Feb. 1856
John Ward	1	–	ditto	unlawful possession	19 April –
Joseph Phillpotts	1	–	Abergavenny County Asylum (Monmouth, &c.).	arson	28 Feb. 1852
Charles Steward	1	–	ditto	burglary	3 July –
Samuel Loveridge	1	–	ditto	shooting with intent to murder.	24 Aug. –
Maria Hughes	–	1	ditto	murder	12 May 1853
Mary Haling	–	1	ditto	wilful damage	13 Sept. 1854
Francis Wright	1	–	Norfolk County Asylum	larceny	9 June 1841
James Taylor	1	–	ditto	ditto	2 Nov. 1850
William Makaham	1	–	ditto	vagrancy and assault on police.	14 Mar. 1855
Thomas Brett	1	–	Nottingham County Asylum	placing obstruction on Midland Counties Railway.	3 Sept. –
Mary Ann Laws	–	1	Oxford and Berks County Asylum.	stealing boots	10 July 1850
John Smith	1	–	ditto	assault, with attempt to strangle.	30 Oct. 1851
John Sadler	1	–	ditto	assault, with intent to murder his wife.	7 Mar. 1853
John Clarke	1	–	ditto	arson	9 Jan. 1854
David Hounslow	1	–	ditto	ditto	10 April 1854
Sarah Joyce	–	1	ditto	larceny	2 Aug. 1855

NAMES.	SEX. M.	SEX. F.	Place of Confinement.	Nature of the Offence Committed.	When Confinement Commenced.
Sarah Daley	–	1	Oxford and Berks County Asylum.	malicious damage	19 Nov. 1855
William Phoucke	1	–	ditto	sheep stealing	1 Jan. 1856
James Grimsdell	1	–	ditto	larceny	4 Jan. –
Hannah Westwood	–	1	Salop and Montgomery County Asylum.	concealing birth of a child.	7 May 1845
John Rudd	1	–	ditto	arson	13 May –
William Clare	1	–	ditto	bestiality	17 Aug. 1853
Sampson Clorley	1	–	ditto	threatening breach of the peace.	1 Aug. 1855
John Cooper Marlow	1	–	Somerset County Asylum	larceny	19 Jan. 1850
Henry Carpenter	1	–	ditto	ditto	29 Sept. 1849
William Guppy	1	–	ditto	bestiality	26 Jan. 1852
Jabez Isaac	1	–	ditto	arson	11 Jan. 1856
Mary Jones	–	1	ditto	larceny	12 Feb. 1850
James Hateley	1	–	Stafford County Asylum	attempted to stab his wife	3 Mar. 1852
John Biddulph	1	–	ditto	assault	29 July –
Samuel Smith	1	–	ditto	rogue and vagabond	11 Apr. 1856
Sarah Smith	–	1	ditto	murder of her child	27 Nov. 1852
Hannah Baker	–	1	ditto	attempt to destroy her child	5 Sept. 1855
Benjamin Cockerell	1	–	Suffolk County Asylum	murder	19 Aug. 1830
George Shearing	1	–	ditto	manslaughter	1 Apr. 1833
Christopher Seymour	1	–	ditto	larceny	19 Sept. 1842
George Alfred Bullock	1	–	ditto	want of sureties to keep the peace.	10 Oct. 1853
George Elderfield	1	–	Surrey County Asylum	arson	30 July 1844
Thomas Brown	1	–	ditto	horsestealing	July 1840
Thomas Stewart	1	–	ditto	felony	July 1850
Thomas Moxley	1	–	ditto	not known	26 Mar. 1853
Thomas Burke	1	–	ditto	larceny	25 Mar. 1854
Henry Dadd	1	–	ditto	cutting and wounding a woman he lived with.	May –
John Day	1	–	ditto	misdemeanour	21 Nov. 1855
William Winkles	1	–	Warwick County Asylum	larceny	About 6 years back.
Edward Catterns	1	–	ditto	murder	About 20 years back.
William Voss	1	–	ditto	murder	23 Nov. 1855
Thomas Bishop	1	–	ditto	assault	25 Feb. 1856
George Card	1	–	Wilts County Asylum	drunkenness and assault	About 1846
Joseph Stevens	1	–	ditto	larceny	20 Sept. 1852
George Turner	1	–	ditto	arson	14 Dec. 1854
Charles Smith	1	–	ditto	drunkenness and assault	4 Dec. 1855
Thomas Manley	1	–	Worcester County Asylum	not finding sureties to keep the peace.	2 Feb. 1854
Mary Greenfield	–	1	ditto	petty larceny, &c.	25 Feb. 1854
William Lawley	1	–	ditto	not finding sureties to keep the peace.	24 Apr. 1855
Ellen Fosbrooke	–	1	ditto	wilful damage	24 May –
John Edwards	1	–	ditto	larceny	10 May –
William Stanley	1	–	ditto	ditto	5 Dec. –
Josiah Johnson	1	–	ditto	ditto	20 Mar. 1856
Thomas Horner	1	–	North and East Ridings of York Asylum.	default of sureties	26 May 1851
George Wandby	1	–	ditto	ditto	2 Dec. 1852
William Dawson	1	–	ditto	ditto	4 Jan. 1854
Thomas Loundsborough, *alias* Belt.	1	–	ditto	carnally assaulting a girl under 10 years of age.	24 Feb. 1855
Hannah Kemp	–	1	ditto	not known	10 Sept. 1851
Esther Dyson	–	1	West York County Asylum	murder	24 Nov. 1831
Benjamin Cusins	1	–	ditto	breach of the peace	21 Apr. 1846
Richard Schofield	1	–	ditto	ditto	6 Dec. 1849
John Bradley	1	–	ditto	ditto	29 June 1855
William Firth	1	–	ditto	larceny	5 Dec. –
William Harris	1	–	Birmingham Borough Asylum	murder	Aug. 1831
Maria Mitchell	–	1	ditto	larceny	7 June 1852
John Hill	1	–	ditto	shooting, with intent, &c.	Mar. 1853
Ann Elizabeth Fisher	–	1	ditto	larceny	June –
Caleb Wm. Farbrother	1	–	ditto	bigamy	Aug. –
Ann Scott	–	1	ditto	larceny	Apr. 1854
William Glover	1	–	ditto	stealing	Feb. 1855
Charles Ethell	1	–	ditto	ditto	June –
Priscilla Warwick	–	1	ditto	larceny	June –
George Chillingworth	1	–	ditto	ditto	Aug. –
Harriet Ann Wenman	–	1	ditto	maliciously wounding	Nov. –
Catherine Stone	–	1	ditto	larceny	Dec. –

NAMES.	SEX.		Place of Confinement.	Nature of the Offence Committed.	When Confinement Commenced.
	M.	F.			
Ambrose J. Whitehouse -	1	–	- - Birmingham Borough Asylum.	Assault - - - -	– Aug. 1831
Francis Russell - -	1	–	Bristol Borough Asylum -	simple larceny - -	27 Feb. 1844
James Kelvey - - -	1	–	Hull Borough Asylum -	- - assault with intent to ravish.	27 Dec. 1845
George Toft - - -	1	–	- - ditto - - -	larceny - - - -	27 Nov. –
Timothy Greathead - -	1	–	- - ditto - - -	vagrancy - - -	11 Sept. 1847
James Brant - - -	1	–	- - ditto - - -	maliciously stabbing -	26 April –
Robert Meggitt - -	1	–	- - ditto - - -	murder - - - -	6 May 1851
John King - - -	1	–	- - ditto - - -	- ditto - - -	19 April 1853
Elizabeth Huggitt - -	–	1	- - ditto - - -	- ditto - - - -	19 April –
William Cooper Robinson	1	–	- - ditto - - -	- - attempt to commit a misdemeanour.	4 Aug. –
Roger Rolfe - - -	1	–	- - Northampton Lunatic Hospital.	arson - - - -	30 Oct. 1846
George Hawkes - -	1	–	- - ditto - - -	attempt to murder - -	10 Nov. 1851
Samuel Thompson - -	1	–	- - ditto - - -	rape - - - -	5 Dec. 1849
Joshua Dawson - -	1	–	- - ditto - - -	keeping a bawdy house -	19 Mar. 1852
Nathaniel Bryan - -	1	–	- - ditto - - -	rape - - - -	26 April 1855
William Kightley - -	1	–	- - ditto - - -	larceny - - - -	22 Aug. 1851
Thomas Briggs - -	1	–	- - ditto - - -	felony - - - -	21 Nov. 1852
George Conner - -	1	–	Bethlehem Lunatic Hospital	murder - - - -	22 Nov. 1816
Richard Colpus, *alias* John Collings.	1	–	- - ditto - - -	unnatural crime - -	6 Jan. 1817
Anthony Abell - -	1	–	- - ditto - - -	murder - - - -	2 June –
Francis Wilkes - -	1	–	- - ditto - - -	- ditto - - - -	13 Aug. –
David Davis - - -	1	–	- - ditto - - -	- - shooting at Lord Palmerston.	19 May 1818
Phillippa May - -	–	1	- - ditto - - -	murder - - - -	9 Aug. 1820
Lucy Daneer - - -	–	1	- - ditto - - -	- ditto - - -	12 June 1823
John Raddon - - -	1	–	- - ditto - - -	cutting with intent, &c. -	23 Feb. 1824
John Roberts - - -	1	–	- - ditto - - -	murder - - - -	12 Nov. 1825
John Kenny - - -	1	–	- - ditto - - -	- ditto - - -	25 Feb. 1829
James Sisk - - -	1	–	- - ditto - - -	- - attempting to shoot with intent to murder.	30 Dec. 1830
Anthony Nyland - -	1	–	- - ditto - - -	attempt to murder - -	30 July 1836
Frederick Seyffert - -	1	–	- - ditto - - -	- ditto - - - -	30 July –
Hannah Smith - -	–	1	- - ditto - - -	murder - - - -	7 Nov. 1837
John Goode - - -	1	–	- - ditto - - -	- - using seditious language in Her Majesty's presence.	27 Nov. –
John Titcomb - - -	1	–	- - ditto - - -	attempt to murder - -	16 May 1838
Joseph Jeffgate - -	1	–	- - ditto - - -	murder - - - -	23 May –
Francis Parker - -	1	–	- - ditto - - -	- ditto - - - -	23 May –
David Jewison - -	1	–	- - ditto - - -	attempt to murder - -	5 Mar. 1839
Ann Clarke - - -	–	1	- - ditto - - -	murder - - - -	7 Dec. –
Edward Oxford - -	1	–	- - ditto - - -	high treason - - -	18 July 1840
John Darby Shelley -	1	–	- - ditto - - -	breach of peace - -	15 Sept. –
Charles Burton - -	1	–	- - ditto - - -	murder - - - -	3 Sept. 1841
Arthur Legent Pearse -	1	–	- - ditto - - -	maliciously shooting -	10 Dec. –
John Griffith Evans -	1	–	- - ditto - - -	maliciously cutting -	12 Jan. 1842
John Quire - - -	1	–	- - ditto - - -	- - ditto - - -	26 Jan. 1843
Daniel M'Naughten -	1	–	- - ditto - - -	murder - - - -	13 Mar. –
James Stevenson - -	1	–	- - ditto - - -	being a dangerous lunatic	21 Mar. –
William Stolzer - -	1	–	- - ditto - - -	murder - - - -	24 Jan. 1844
Patrick Connell - -	1	–	- - ditto - - -	cutting and wounding -	1 Mar. –
Richard Dadd - - -	1	–	- - ditto - - -	murder - - - -	22 Aug. –
William Ross Tuchet -	1	–	- - ditto - - -	maliciously shooting -	11 Nov. –
George Cobus - - -	1	–	- - ditto - - -	murder - - - -	9 Jan. 1845
Martha Brixey - -	–	1	- - ditto - - -	- ditto - - - -	4 June –
Thomas Curtis - -	1	–	- - ditto - - -	cutting and wounding -	23 Sept. –
George Johnston - -	1	–	- - ditto - - -	murder - - - -	23 Feb. 1846
William Sellers - -	1	–	- - ditto - - -	- ditto - - - -	2 Oct. –
Robert Knowlson - -	1	–	- - ditto - - -	- ditto - - - -	2 Oct. –
Francis Breton - -	1	–	- - ditto - - -	- ditto - - - -	11 July 1849
Thomas Mitchell - -	1	–	- - ditto - - -	- ditto - - - -	17 July –
Harold Strelly - -	1	–	- - ditto - - -	- ditto - - - -	18 July –
John Ovenstone - -	1	–	- - ditto - - -	maliciously shooting -	8 Aug. –
James Layton - - -	1	–	- - ditto - - -	murder - - - -	9 Aug. –
Sarah Jackson - -	–	1	- - ditto - - -	attempt to murder - -	4 Oct. –
Murdoch M'Leod - -	1	–	- - ditto - - -	murder - - - -	2 Nov. –
Thomas Sones - - -	1	–	- - ditto - - -	- ditto - - - -	15 Dec. –
Sarah Drake - - -	–	1	- - ditto - - -	- ditto - - - -	24 Jan. 1850
Ann Scuffam - - -	–	1	- - ditto - - -	- ditto - - - -	18 Feb. –
Mary Ann Ogden - -	–	1	- - ditto - - -	- ditto - - - -	6 April –
James Weston - -	1	–	- - ditto - - -	- ditto - - - -	6 April –

NAMES.	SEX. M.	SEX. F.	Place of Confinement.	Nature of the Offence Committed.	When Confinement Commenced.
Henry Watson	1	–	Bethlehem Hospital	murder	6 April 1850
David James	1	–	ditto	ditto	17 June –
Elijah Webster	1	–	ditto	cutting and wounding	19 Aug. –
William Bowskill	1	–	ditto	stabbing	19 Aug. –
George Berry	1	–	ditto	murder	19 Aug. –
John Taylor	1	–	ditto	ditto	28 Sept. –
William Clapham	1	–	ditto	ditto	17 Mar. 1852
John Iliff	1	–	ditto	maliciously cutting and wounding.	22 Mar. –
Thomas Cathie Wheeler	1	–	ditto	murder	3 June –
Maria Chitty	–	1	ditto	ditto	24 Aug. –
Elizabeth Thew	–	1	ditto	ditto	20 Sept. –
William Thomas	1	–	ditto	ditto	8 Oct. –
Emma Lewis	–	1	ditto	ditto	30 Oct. –
Amelia Elizabeth Burt	–	1	ditto	ditto	1 Jan. 1853
Jeremiah Tooley	1	–	ditto	ditto	6 Jan. –
William Short	1	–	ditto	stealing a box	4 June –
Michael Gallaghan	1	–	ditto	maliciously wounding	6 Sept. –
John Phillips	1	–	ditto	ditto cutting	7 Sept. –
John Campbell	1	–	ditto	murder	1 Dec. –
Mary Ann Parr	–	1	ditto	wilful murder	20 Mar. 1854
Henry Simmons	1	–	ditto	murder	9 Aug. –
Mary Ann Brough	–	1	ditto	ditto	25 Aug. –
Joseph Baines	1	–	ditto	ditto	11 Oct. –
Hugh Pollard Willoughby	1	–	ditto	feloniously shooting	17 Nov. –
Tolemache Bloomfield	1	–	ditto	maliciously stabbing	20 Nov. –
John Goodall	1	–	ditto	murder	20 Dec. –
Richard Elcomb	1	–	ditto	maliciously cutting	11 Jan. 1855
Hugh M'Culloch Robinson	1	–	ditto	stabbing and arson	17 Jan. –
Catherine Savell	–	1	ditto	murder	17 Jan. –
James Mills	1	–	ditto	larceny	8 Mar. –
Lazarus Hempstead	1	–	ditto	murder	30 Mar. –
Miguel Yzquierdo	1	–	ditto	ditto	7 April –
Mary Chinn	–	1	ditto	ditto	26 April –
Abraham Sewell	1	–	ditto	ditto	6 June –
Edward Evans	1	–	ditto	wounding, &c.	25 June –
George Calvert	1	–	ditto	murder	25 June –
Avery Edwards	1	–	ditto	stabbing	11 Aug. –
Richard Skelton	1	–	ditto	maliciously cutting	23 Aug. –
George Henry Smith	1	–	ditto	murder	7 Sept. –
Mary Ann Beveridge	–	1	ditto	ditto	9 Jan. 1856
Robert Rogers Harvey	1	–	ditto	shooting with intent, &c.	25 Jan. –
John Newitt	1	–	ditto	murder	4 Feb. –
Joseph Mumns	1	–	ditto	arson	13 Feb. –
Sarah Allen	–	1	ditto	murder	19 Feb. –
Mary M'Niel	–	1	ditto	ditto	– –
John Francis	1	–	ditto	ditto	7 Mar. –
Henry Stephens	1	–	ditto	obtaining money by false pretences.	10 Mar. –
Andrew Robertson	1	–	ditto	theft	27 Mar. –
Harriet Arthur	–	1	Bethnal House, Bethnal-green.	murder	15 Aug. 1842
John Baiston	1	–	ditto	stabbing	14 Mar. 1829
Robert Stevens	1	–	ditto	wilful damage	22 Nov. 1843
James Wheatley	1	–	ditto	breach of the peace	22 Jan. 1845
Edward C. Stroud	1	–	ditto	indecently exposing his person.	20 June 1838
Henry Broadbridge, jun.	1	–	ditto	breaking into and robbing his father's house.	15 Dec. 1855
William Jarrett	1	–	Grove Hall, Bow	believed to be assault	17 Mar. 1846
Christopher Smith	1	–	ditto	ditto	20 Feb. 1854
Thomas Emery	1	–	ditto	not known	19 May 1852
Thomas Boniface	1	–	Camberwell House, Camberwell.	assault	3 Aug. 1846
John Clarke	1	–	ditto	vagrancy	19 Jan. 1847
Thomas Cross	1	–	ditto	murder	7 Aug. –
Eliza Branston	–	1	ditto	larceny	26 Nov. –
John Horn	1	–	ditto	assault	3 Feb. 1851
John Loft	1	–	ditto	larceny in dwelling-house	10 Mar. 1854
John Smith	1	–	ditto	sheep stealing	25 Jan. 1855
Mary Ann Carter	–	1	ditto	assault	26 May –
Jane Allen	–	1	ditto	felony	24 July –
Thos. Mackintosh Davidson	1	–	The Retreat, Clapham	manslaughter	19 Oct. 1847
John Dudley	1	–	Pembroke House, Hackney	murder	15 May 1855

NAMES.	SEX. M.	SEX. F.	Place of Confinement.	Nature of the Offence Committed.	When Confinement Commenced.
Susan Blake	–	1	Hoxton House, Hoxton	cutting and wounding a person.	5 Mar. 1836
John William Bird	1	–	ditto	forgery	23 Jan. 1850
Joseph Barnes	1	–	ditto	larceny	17 Jan. 1856
Joseph Berridge	1	–	ditto	felony	8 Feb. –
James Evans	1	–	ditto	maliciously cutting	28 June 1854
Michael Fegan	1	–	ditto	larceny	28 Feb. 1856
Mary Leonard	–	1	ditto	ditto	1 June 1838
Mary Murray	–	1	ditto	assault	23 Jan. –
Jane Madden	–	1	ditto	larceny	22 Aug. 1854
Joseph Thomas Fulham	1	–	ditto	assault	12 Oct. 1847
James Williams	1	–	Plympton House, Plympton	larceny	2 Mar. 1855
Daniel Divine	1	–	Bensham Asylum, Bensham, near Gateshead.	robbery	21 April 1842
Banerd Connolly	1	–	ditto		3 May 1847
James Sanders	1	–	ditto		18 June 1849
Andrew Mitchell Crawford	1	–	ditto	undergoing sentence, and became insane.	10 Oct. 1851
James Brannar	1	–	ditto	undergoing sentence, and became insane.	4 Jan. 1854
James Scott	1	–	ditto	striking a fellow-labourer with a piece of iron.	18 Jan. –
Joseph Thompson	1	–	Gateshead Fell Asylum	maliciously stabbing	14 Feb. 1833
Richard Simpson	1	–	ditto	murder	27 Oct. 1846
William Stalker	1	–	ditto	ditto	20 Jan. 1848
John Cross	1	–	ditto	maliciously stabbing	3 Sept. 1852
Edward Simpson	1	–	ditto	larceny	11 Dec. 1854
Isabella Falcon	–	1	ditto	murder	25 May 1839
Mary Johnston	–	1	ditto	larceny	5 April 1856
Isaac Morgan	1	–	Vernon House, Briton Ferry	ditto	12 Jan. 1855
Maria Lloyd	–	1	ditto	ditto	15 Sept. 1854
Thomas Davies	1	–	ditto	stealing, and arson	10 May 1849
John Jones	1	–	ditto	assault to ravish	8 April 1854
James Logan	1	–	ditto	cutting and wounding	18 Oct. 1853
John Jenkins	1	–	ditto	indecent exposure	11 July 1846
Mary Lewis	–	1	ditto	murder	24 Nov. 1854
Reverend Walter Young	1	–	Westbrook House, Alton	exposure of the person in Hyde-park.	21 July 1846
John Webb	1	–	Whitchurch Asylum, near Ross.	assault on his mother, so as to cause death.	15 June 1843
James Taylor	1	–	ditto	not known	8 May 1855
Uriah Baldwin	1	–	Norwich Infirmary, Norwich	maliciously cutting and wounding his wife, &c.	11 Feb. 1839
John Jones	1	–	Amroth Castle, near Tenby	assaulting persons	23 Dec. 1851
Mary Hughes	–	1	ditto	murdered three of her children by hanging.	Jan. 1855
Augustine W. B. Kelly	1	–	Ticehurst Asylum, Ticehurst	maliciously cutting	25 Feb. 1837
John Breckon	1	–	Fisherton House, Fisherton Anger.	larceny from person	6 Mar. 1847
William Hudson Blayney	1	–	ditto	stealing bank notes	25 Mar. –
William Jones	1	–	ditto	larceny	1 Mar. –
Robert Evans	1	–	ditto	unknown	July 1836
George Parry	1	–	ditto	larceny	Dec. 1839
Benjamin Robinson	1	–	ditto	misdemeanour	Aug. 1840
Thomas Mitchell	1	–	ditto	burglary	May –
Thomas Watkins	1	–	ditto	ditto	Jan. 1849
Charles Williams	1	–	ditto	larceny	July 1846
John Thompson	1	–	ditto	felony	Oct. 1845
Jasper Burr	1	–	ditto	housebreaking	Oct. 1844
David Syme	1	–	ditto	unknown	Oct. 1847
George Weaver	1	–	ditto	sheep stealing	Mar. 1837
Hugh Kelly	1	–	ditto	robbery	April –
Robert Kirby	1	–	ditto	theft	July 1845
Robert Searly	1	–	ditto	arson	Mar. 1843
Joseph Lees	1	–	ditto	stealing	June 1845
William Cowle	1	–	ditto	larceny	May 1843
John Burgess	1	–	ditto	burglary	Mar. 1844
Edward Downey	1	–	ditto	felony	April –
James McLeod	1	–	ditto	larceny	July 1847
Eli Sunderland	1	–	ditto	ditto	Mar. –
James Connell	1	–	ditto	uttering base coin	Mar. 1841
Joseph Castelletti	1	–	ditto	felony	Jan. 1847
James Woolf	1	–	ditto	desertion	June 1848
Isaac Hoare	1	–	ditto	felony	Dec. 1847
Samuel Sauter	1	–	ditto	ditto	Mar. 1848
Joseph Josiah Greig	1	–	ditto	ditto	June 1846
William Jones	1	–	ditto	ditto	July 1848

NAMES.	SEX. M.	SEX. F.	Place of Confinement.	Nature of the Offence Committed.	When Confinement Commenced.
Martin Dowlan	1	–	Fisherton House, Fisherton Anger.	misdemeanour	July 1845
Robert Grimshaw	1	–	ditto	ditto	unknown.
Jonathan Boak	1	–	ditto	larceny	Mar. 1850
John Horry	1	–	ditto	rape	Mar. –
John Gough	1	–	ditto	larceny	Feb. 1849
John Atkins	1	–	ditto	theft	Mar. –
David Dodge	1	–	ditto	stealing heifers	July 1846
James Gibson	1	–	ditto	arson	July 1849
Thomas Harris	1	–	ditto	rape	Dec. 1844
John Hill	1	–	ditto	felony	Mar. 1850
John Wilson	1	–	ditto	ditto	Dec. –
James Satchwell	1	–	ditto	stealing	Oct. 1848
Robert Wheals	1	–	ditto	felony	July 1850
John Botts	1	–	ditto	ditto	Jan. 1851
Joseph Smith	1	–	ditto	burglary	July 1850
Michael Bannan	1	–	ditto	desertion	Jan. 1851
Joseph Horner	1	–	ditto	stealing	Apr. –
Daniel Gleeson	1	–	ditto	housebreaking	Jan. 1848
Joseph Grey	1	–	ditto	sheep stealing	Jan. 1849
Thomas Cain	1	–	ditto	felony	Apr. 1851
Joseph Briggs	1	–	ditto	larceny	July 1850
Henry Smith	1	–	ditto	ditto	Dec. –
Henry Cottrell	1	–	ditto	felony	Dec. –
William Gill	1	–	ditto	stealing hay	Jan. 1852
James Willick	1	–	ditto	larceny	unknown.
Stephen Starling	1	–	ditto	burglary	July 1852
George Williams	1	–	ditto	felony	July –
John Donovan	1	–	ditto	maliciously cutting	Feb. –
Alexander M'Kenzie	1	–	ditto	housebreaking	Oct. 1851
Frank Rum	1	–	ditto	horse stealing	Oct. 1852
Henry Beaver	1	–	ditto	housebreaking	Feb. 1851
Henry Baker	1	–	ditto	disobedience of orders	June 1850
Michael M'Kenzie	1	–	ditto	bestiality	July 1851
Thomas Hicks	1	–	ditto	felony	July 1850
David Parker	1	–	ditto	ditto	Mar. 1852
Robert Turner	1	–	ditto	ditto	Mar. –
James Bailey	1	–	ditto	maliciously cutting	Mar. 1846
George Davis	1	–	ditto	felony	May 1852
James Holmes	1	–	ditto	ditto	Mar. 1853
William Sandaman	1	–	ditto	unnatural offence	May 1852
James Tallent	1	–	ditto	burglary	Aug. –
John M'Ewan	1	–	ditto	theft	Sept. –
Thomas Jones	1	–	ditto	committed on charge of murder.	Nov. 1849
Thomas Whitaker	1	–	ditto	sodomy	Dec. 1850
James Smith	1	–	ditto	felony	July 1852
William Woods	1	–	ditto	theft	Sept. 1850
John Likeman	1	–	ditto	burglary	Apr. 1853
James Stokes	1	–	ditto	ditto	Mar. 1852
John Berger	1	–	ditto	larceny	July 1853
Thomas Brady	1	–	ditto	burglary	July –
John Chappell	1	–	ditto	larceny	May 1854
Thomas Childs	1	–	ditto	ditto	July –
John Dovett	1	–	ditto	housebreaking	Oct. 1851
William Gorey	1	–	ditto	larceny	June –
John Hollingsworth	1	–	ditto	arson	Apr. 1853
John Quantock	1	–	ditto	larceny	June –
William Ship	1	–	ditto	ditto	May –
William Young	1	–	ditto	sheep stealing	June –
Peter Morrison	1	–	ditto	pardoned convict	not known.
Job Collings	1	–	ditto	bestiality	Aug. 1836
Patrick Lindon	1	–	ditto	assault	Feb. 1853
Stephen Hillier	1	–	ditto	cutting and wounding	June –
Francis Henry Coe	1	–	ditto	larceny	Jan. 1854
Richard Davis	1	–	ditto	desertion	Sept. –
William Hayward	1	–	ditto	cattle stealing	June –
Henry Smith	1	–	ditto	larceny	June 1853
Thomas Whitford	1	–	ditto	indicted for murder	Mar. 1849
Richard Dams	1	–	ditto	larceny	July 1852

(*continued*)

NAMES.	SEX. M.	SEX. F.	Place of Confinement.	Nature of the Offence Committed.	When Confinement Commenced.
John Siddall	1	–	Fisherton House, Fisherton Anger.	housebreaking	July 1855
Alfred Allen	1	–	ditto	felony	unknown.
Zebedee Abbott	1	–	ditto	arson	July 1846
David Carrott	1	–	ditto	felony	unknown.
Samuel Dunham	1	–	ditto	unknown	ditto.
Daniel Galty	1	–	ditto	arson	ditto.
William M'Kave	1	–	ditto	malicious damage	ditto.
Roger Powell	1	–	ditto	larceny	July 1846
James Roat	1	–	ditto	felony	July 1847
John Smith	1	–	ditto	burglary	unknown.
John Stockley	1	–	ditto	breach of the peace	Nov. 1844
Thomas Wright	1	–	ditto	indicted for murder	Mar. 1823
John Worthy	1	–	ditto	breach of the peace	unknown.
Ann M'Cormack	–	1	ditto	larceny	Nov. 1844
Jane Blackmore	–	1	ditto	ditto	Oct. 1823
Bridget Ricketts	–	1	ditto	ditto	Jan. 1845
Sarah Hill	–	1	ditto	felony	April 1849
Mary Smith	–	1	ditto	ditto	Sept. 1830
Eliza Pegg	–	1	ditto	concealing birth	Mar. 1847
Ann Byrom	–	1	ditto	murder	Aug. 1838
Elizabeth Coombes	–	1	ditto	arson	Mar. 1853
Ann Dowd	–	1	ditto	felony	Nov. 1851
Isabella Shields	–	1	ditto	theft	Feb. –
Mary Johnston	–	1	ditto	larceny	Feb. 1853
Bridget Callaghan	–	1	ditto	ditto	Oct. 1852
Ann Martin	–	1	ditto	murder	Mar. 1854
Ellen M'Namara	–	1	ditto	robbery	Aug. 1852
Ann Lynch	–	1	ditto	felony	Aug. –
Ann Rose	–	1	ditto	larceny	19 Oct. –
Sophia Hyson	–	1	ditto	manslaughter	Jan. 1855
Maria Borley	–	1	ditto	murder	Mar. 1854
Rebecca Turton	–	1	ditto	ditto	May –
Ann Birch	–	1	ditto	larceny	Jan. 1852
Catherine Butcher	–	1	ditto	arson	July –
Elizabeth Craft	–	1	ditto	infanticide	unknown.
Elizabeth Lewis	–	1	ditto	breach of the peace	Nov. 1852
Sarah Watts	–	1	ditto	ditto	unknown.
Mary Ruddle	–	1	Fiddington House, Market Lavington, Wilts.	attempt to murder	26 Jan. 1846
Sarah Rose	–	1	ditto	vagrancy	11 July 1840
Thomas Kingstone	1	–	ditto	stealing, &c.	20 Sept. 1851
William Harding	1	–	Dunnington House, near York.	vagrancy	8 June 1850
* William Reeve	1	–	Fisherton House, Fisherton Anger.	mutiny	18 Mar. 1856
* George Walker, *alias* Charles Ferrington.	1	–	ditto	burglary	11 Dec. 1855
* Charles Barnhard	1	–	ditto	larceny	20 Nov. –
* Charles Curtis	1	–	ditto	ditto	28 Jan. 1856
* John Bartlett	1	–	ditto	ditto	4 Dec. 1855
* Martin Lyons	1	–	ditto	arson	13 Feb. 1856
* Daniel Flynn	1	–	ditto	larceny	20 Mar. –
* Henry Metcalfe	1	–	ditto	ditto	21 Dec. 1855
* John Ardrey	1	–	ditto	wounding, with intent to murder.	25 June –
* Alfred Smith	1	–	ditto	burglary	8 Oct. –

* These 10 Patients were removed from Bethlehem Hospital prior to date of that Return, and subsequent to the Return made for Fisherton House.

GAOLS.

NAMES.	SEX. M.	SEX. F.	Place of Confinement.	Nature of the Offence Committed.	When Confinement Commenced.
Martha Andrews	–	1	Chester Castle	attempting to drown Elizabeth Ashworth.	31 Jan. 1856
Charles Manuel	1	–	Denbigh County Prison, at Ruthin.	assault	1 April –
James Downton	1	–	Hants County Prison, Winchester.	misbehaviour in union	9 April –
William Boxer	1	–	Lancaster, Kirkdale	unnatural crime	15 Mar. 1851
Ann M'Aveeley	–	1	Liverpool Borough Gaol	stabbing her husband	12 Feb. 1856
James Fox (younger)	1	–	Lancaster Knutsford Gaol	threatening to kill Js. Fox, sen.	6 Mar. –
Elizabeth Wharmsby	–	1	Notts County Gaol	stealing	20 Oct. 1855
Wm. Scales Brightwell	1	–	Norfolk, Swaffham Prison	arson	31 Dec. –
Michael Bryan	1	–	East Sussex, Lewes	larceny	18 Dec. –
Ellen Davis	–	1	Stafford County Prison	wilful murder	30 Dec. 1853
David Davies	1	–	Worcester County Gaol	murder	12 Aug. 1852
William Marshall	1	–	York Castle	ditto	18 June 1837
George Watson	1	–	ditto	ditto	5 Aug. 1845
Robert Young	1	–	ditto	ditto	23 July 1849
George Houlton	1	–	ditto	arson	26 Oct. 1850
Edward Heelass	1	–	ditto	presenting a loaded pistol at a person.	7 Dec. –
George Barton	1	–	ditto	bestiality	2 June 1854
Joseph May	1	–	ditto	cutting and wounding	17 Oct. –
Robert Hadcock	1	–	ditto	arson	26 Oct. 1855
James Hill	1	–	ditto	murder	26 Jan. 1856
Ann Laycock	–	1	ditto	cutting and wounding	15 July 1850
William Warren	1	–	York, N. R., Northallerton House of Correction.	robbery with violence	9 June 1848

NUMBER of CRIMINAL LUNATICS now under Confinement.

In county asylums, hospitals, and licensed houses	569
In gaols	22
TOTAL	591

LUNATICS.

RETURNS of Lunatics against whom Commissions of Lunacy are now in force, and the Amount of their Annual Incomes, &c.

(*Mr. Tite.*)

Ordered, by The House of Commons, *to be Printed,*
26 *May* 1856.

Under 2 oz.

ABSTRACTS of ACCOUNTS of MONIES Received and Paid on account of the several COUNTY and BOROUGH ASYLUMS in *England* and *Wales* during the Year ending 31 December 1855.

Office of Commissioners in Lunacy.

JOHN FORSTER, Secretary.

GENERAL STATEMENT of the RECEIPTS and PAYMENTS on account of the several COUNTY and BOROUGH LUNATIC ASYLUMS in *England* and *Wales*, between 1st January and the 31st December 1855.

BEDFORD COUNTY LUNATIC ASYLUM.

RECEIPTS.	£.	s.	d.	PAYMENTS.	£.	s.	d.
To balance in Superintendent's hands on 31st December 1854	50	–	–	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,432	6	11
1. From interest on monies invested	—			3. Provisions	4,086	15	–
2. From sales and produce of labour, &c. &c.	246	6	11	4. Necessaries, &c.	607	13	4
3. Maintenance Account, viz.:				5. Surgery and dispensary	62	15	9
Private patients	—			6. Clothing	638	4	3
Pauper ditto	8,035	17	9	7. Furniture and bedding	614	13	7
4. From county, for ordinary repairs	235	1	8	8. Funeral expenses	27	6	–
5. From voluntary contributions	—			9. Building and repairs	217	8	9
6. Repayment of expenses of removals	—			10. Garden and farm	217	1	4
7. Miscellaneous	202	8	–	11. Miscellaneous	752	1	6
				Purchase of 3 per cent. Consols	180	–	–
				Balance due to Treasurer, 31st December 1854	434	8	7
Total Receipts £.	8,769	14	4	Total Payments £.	9,270	15	–
Balance due to treasurer 31st December 1855	566	–	8	Balance in Superintendent's hands on 31st December 1855	65	–	–
£.	9,335	15	–	£.	9,335	15	–

BUCKS COUNTY LUNATIC ASYLUM.

RECEIPTS.	£.	s.	d.	PAYMENTS.	£.	s.	d.
To balance in hand on 31st December 1854	147	18	–¼	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,296	17	6
1. From interest on monies invested	—			3. Provisions	3,010	5	4½
2. From sales and produce of labour, &c. &c.	142	6	6	4. Necessaries, &c.	706	–	9
3. Maintenance Account, viz:				5. Surgery and dispensary	34	5	1
Private patients	19	5	2	6. Clothing	312	6	4
Pauper ditto	5,377	14	3	7. Furniture and bedding	—		
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	—			8. Funeral expenses	11	8	6
5. From voluntary contributions	—			9. Building and repairs	—		
6. Repayment of expenses of removals	14	11	–	10. Garden and farm	98	15	–
7. Miscellaneous	228	14	1	11. Miscellaneous	221	2	11½
				Total Payments £.	5,691	1	6
				Balance in hand on 31st December 1855	239	7	6¼
Total Receipts £.	5,930	9	–¼	£.	5,930	9	–¼

CHESTER COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	77	1	7	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,187	3	6
1. From interest on monies invested	5	18	–	3. Provisions	3,423	6	11
2. From sales and produce of labour, &c. &c.	126	10	11	4. Necessaries, &c.	480	19	3
3. Maintenance Account, viz.:				5. Surgery and dispensary	82	12	5
Private patients	—			6. Clothing	383	18	3
Pauper ditto	5,974	6	6	7. Furniture and bedding	250	15	8
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	401	15	7	8. Funeral expenses	29	8	–
5. From voluntary contributions	—			9. Building and repairs	105	5	10
6. Repayment of expenses of removals	—			10. Garden and farm	91	4	3
7. Miscellaneous	—			11. Miscellaneous	205	10	11
Legacy by Mr. A. Middlewich	50	–	–	Total Payments	6,240	5	–
By private property of criminal and other patients	118	8	–	Balance in hand on 31st December 1855	513	15	7
Total Receipts £.	6,754	–	7	£.	6,754	–	7

CORNWALL COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	340	15	6	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,293	8	1
1. From interest on monies invested	—			3. Provisions	2,979	16	8
2. From sales and produce of labour, &c. &c.	7	–	1	4. Necessaries, &c.	392	8	11
3. Maintenance Account, viz.:				5. Surgery and dispensary	47	19	6
Private patients	857	4	7	6. Clothing	200	8	2½
Pauper ditto	4,002	12	5	7. Furniture and bedding	272	12	4½
From boroughs not contributing	421	18	9	8. Funeral expenses	34	19	–
From counties, ditto	10	5	6	9. Building and repairs	113	9	8
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	71	3	6	10. Garden and farm	49	12	3
5. From voluntary contributions	63	13	6	11. Miscellaneous	155	8	3
6. Repayment of expenses of removals	—			Building account	620	15	8
7. Miscellaneous	—			Total Payments	6,160	18	7
From county treasurer, for criminal and vagrant lunatics	83	17	2	Balance in hand on 31st December 1855	197	12	5
Ditto, on building account	500	–	–				
Total Receipts £.	6,358	11	–	£.	6,358	11	–

DENBIGH JOINT COUNTIES LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	—			1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	898	3	9
1. From interest on monies invested	—			3. Provisions	2,708	1	11½
2. From sales and produce of labour, &c. &c.	96	9	4	4. Necessaries, &c.	516	12	1
3. Maintenance Account, viz.:				5. Surgery and dispensary	123	1	7
Private patients	866	19	10	6. Clothing	310	7	10½
Pauper ditto	4,748	4	8	7. Furniture and bedding	242	5	2½
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	544	16	1	8. Funeral expenses	19	4	6
5. From voluntary contributions	—			9. Building and repairs	435	12	5
6. Repayment of expenses of removals	86	10	3	10. Garden and farm	341	9	9
7. Miscellaneous	4	16	6	11. Miscellaneous	427	2	–½
				Balance due to treasurer, 31 December 1854	34	6	11
				Total Payments	6,056	8	1
				Balance in hand on 31st December 1855	291	8	7
Total Receipts £.	6,347	16	8	£.	6,347	16	8

DERBY COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	2,882	5	4	1. Monies (if any) invested during the year	—		
Ditto, in Steward's hands, ditto	63	—	6	2. Salaries and wages	1,785	6	—
Receipts under the following heads, viz.:				3. Provisions	3,209	—	2
1. From interest on monies invested	—			4. Necessaries, &c.	1,288	13	7
2. From sales and produce of labour, &c. &c.	62	9	2	5. Surgery and dispensary	119	9	5
3. Maintenance Account, viz.:				6. Clothing	331	11	10
Private patients	281	2	—	7. Furniture and bedding	255	13	5
Pauper ditto	6,400	15	4	8. Funeral expenses	17	1	—
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	—			9. Building and repairs	57	16	9
5. From voluntary contributions	—			10. Garden and farm	329	4	9
6. Repayment of expenses of removals	20	3	—	11. Miscellaneous	—		
7. Miscellaneous	—			Total Payments	7,393	16	11
				Balance in treasurer's hands on 31st December 1855 — £. 2,267 — 8	2,315	18	5
				Ditto in steward's hands, ditto 48 17 9			
Total Receipts £.	9,709	15	4	£.	9,709	15	4

DEVON COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	879	4	11	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,734	12	—
1. From interest on monies invested	—			3. Provisions	5,878	10	2
2. From sales and produce of labour, &c. &c.	78	7	6	4. Necessaries, &c.	1,223	17	2
3. Maintenance Account, viz.:				5. Surgery and dispensary	205	12	8
Private patients	—			6. Clothing	1,389	18	4
Pauper ditto	11,028	—	8	7. Furniture and bedding			
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	—			8. Funeral expenses	29	8	—
5. From voluntary contributions	—			9. Building and repairs	323	3	7
6. Repayment of expenses of removals	—			10. Garden and farm	—		
7. Miscellaneous	17	9	6	11. Miscellaneous	486	14	5
				Total Payments	11,271	16	4
				Balance in hand on 31st December 1855	731	6	3
Total Receipts £.	12,003	2	7	£.	12,003	2	7

DORSET COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	37	13	8	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	586	17	2
1. From interest on monies invested	135	—	—	3. Provisions	1,796	15	10
2. From sales and produce of labour, &c. &c.	—			4. Necessaries, &c.	408	4	—
3. Maintenance Account, viz.:				5. Surgery and dispensary	53	17	11
Private patients	—			6. Clothing	130	17	5½
Pauper ditto	4,234	12	10	7. Furniture and bedding	130	3	2½
4. From county treasurer: for buildings and repairs, furniture, fittings, and patients at Fisherton	611	5	—	8. Funeral expenses	20	3	6
5. From voluntary contributions	—			9. Building and repairs	—		
6. Repayment of expenses of removals	—			10. Garden and farm	218	9	2
7. Miscellaneous	—			11. Miscellaneous	157	10	5
From contingent fund for furniture	112	2	7	Patients at Fisherton, from Maintenance Account	944	3	10
Ditto, for Maintenance Account	57	6	2	Contingent fund	112	2	7
For funerals	20	3	6	County treasurer	611	5	—
				Total Payments	5,170	10	1
				Balance in hand on 31st December 1855	37	13	8
Total Receipts £.	5,208	3	9	£.	5,208	3	9

ESSEX COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	1,448	13	10	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,815	6	3
1. From interest on monies invested	—			3. Provisions	3,981	11	2
2. From sales and produce of labour, &c. &c.	—			4. Necessaries, &c.	968	1	3
3. Maintenance Account, viz.:				5. Surgery and dispensary	52	11	2
Private patients	65	11	11	6. Clothing	400	3	5
Pauper ditto	8,388	16	2	7. Furniture and bedding	275	9	4
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	395	19	10	8. Funeral expenses	52	—	—
5. From voluntary contributions	—			9. Building and repairs	590	10	6
6. Repayment of expenses of removals	—			10. Garden and farm	208	4	9
7. Miscellaneous	18	12	6	11. Miscellaneous	258	15	—
				Total Payments	8,602	12	10
				Balance in hand on 31st December 1855	1,715	1	5
Total Receipts £.	10,317	14	3	£.	10,317	14	3

GLOUCESTER COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	2,189	14	10½	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,867	4	1¾
1. From interest on monies invested	140	13	11	3. Provisions	6,352	16	9
2. From sales and produce of labour, &c. &c.	242	6	7	4. Necessaries, &c.	1,067	10	6½
3. Maintenance Account, viz.:				5. Surgery and dispensary	207	19	—
Private patients	2,745	5	4	6. Clothing	595	13	7½
Pauper ditto	9,148	8	1	7. Furniture and bedding	565	14	2
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	3,648	7	3	8. Funeral expenses	35	19	—
5. From voluntary contributions	5	—	—	9. Building and repairs	3,538	16	8½
6. Repayment of expenses of removals	—	3	6	10. Garden and farm	108	3	1
7. Miscellaneous	24	15	3	11. Miscellaneous	1,637	9	5¾
				Total Payments	15,977	6	6
				Balance in hand on 31st December 1855	2,167	8	3½
Total Receipts £.	18,144	14	9½	£.	18,144	14	9½

HANTS COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	826	16	2	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,503	7	9
1. From interest on monies invested	—			3. Provisions	3,579	15	11¾
2. From sales and produce of labour, &c. &c.	49	8	1	4. Necessaries, &c.	1,094	7	5
3. Maintenance Account, viz.:				5. Surgery and dispensary	117	10	3
Private patients	326	7	10	6. Clothing	407	17	3½
Pauper ditto	8,157	15	10½	7. Furniture and bedding	168	14	7
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	—			8. Funeral expenses	25	7	6
5. From voluntary contributions	—			9. Building and repairs	209	3	7
6. Repayment of expenses of removals	24	5	2	10. Garden and farm	617	11	11½
7. Miscellaneous; oak and ash timber	355	17	2	11. Miscellaneous	198	18	—
				Building and repairs paid out of extra weekly charge for private patients, and patients from out-counties and non-contributing boroughs, &c.	527	8	7
				Total Payments	8,450	2	10¾
				Balance in hand on 31st December 1855	1,290	6	4¾
Total Receipts £.	9,740	9	3½	£.	9,740	9	3½

KENT COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	630	7	9	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz:				2. Salaries and wages	3,209	2	6
1. From interest on monies invested	—			3. Provisions	7,203	17	5
2. From sales and produce of labour, &c. &c.	77	17	8	4. Necessaries, &c.	2,046	13	3
3. Maintenance Account, viz.:				5. Surgery and dispensary	135	6	5
Private patients	459	5	9	6. Clothing	1,084	1	6
Pauper ditto	16,170	13	8	7. Furniture and bedding	876	18	4
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	275	16	8	8. Funeral expenses	109	17	6
				9. Building and repairs	275	16	8
				10. Garden and farm	717	12	4
				11. Miscellaneous	373	6	5
				County treasurer as for rent	694	14	4
5. From voluntary contributions	—			Total Payments	16,727	6	8
6. Repayment of expenses of removals	—			Balance in hand on 31st December 1855	886	14	10
7. Miscellaneous	—						
Total Receipts £.	17,614	1	6	£.	17,614	1	6

LANCASTER COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	—			1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	2,959	11	—
1. From interest on monies invested	—			3. Provisions	6,288	15	11
2. From sales and produce of labour, &c &c.	173	16	3	4. Necessaries, &c.	1,098	9	3
3. Maintenance Account, viz.:				5. Surgery and dispensary	191	17	11
Private patients	—			6. Clothing	988	5	6
Pauper ditto	14,444	11	2	7. Furniture and bedding	910	6	9
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	1,976	16	8	8. Funeral expenses	42	10	11
				9. Building and repairs	1,958	18	—
				10. Garden and farm	52	16	3
				11. Miscellaneous	195	5	1
				Balance due to treasurer, 31st December 1854	1,420	1	9
5. From voluntary contributions	—			Total Payments	16,106	18	4
6. Repayment of expenses of removals	—			Balance in hand on 31st December 1855	488	5	9
7. Miscellaneous	—						
Total Receipts £.	16,595	4	1	£.	16,595	4	1

LANCASTER COUNTY LUNATIC ASYLUM, AT PRESTWICH.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	624	15	5	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,818	12	9
1. From interest on monies invested	10	11	2	3. Provisions	5,640	4	5
2. From sales and produce of labour, &c. &c.	149	7	7	4. Necessaries, &c.	933	2	9
3. Maintenance Account, viz.:				5. Surgery and dispensary	123	10	8
Private patients	—			6. Clothing	488	7	3
Pauper ditto	10,061	17	3	7. Furniture and bedding	284	6	9
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	—			8. Funeral expenses	27	14	—
				9. Building and repairs	—		
				10. Garden and farm	383	7	7
				11. Miscellaneous	627	1	3
5. From voluntary contributions	—			Total Payments	10,326	7	5
6. Repayment of expenses of removals	—			Balance in hand on 31st December 1855	520	4	—
7. Miscellaneous	—						
Total Receipts £.	10,846	11	5	£.	10,846	11	5

RAINHILL COUNTY LUNATIC ASYLUM, LANCASTER.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in steward's hands on 31st December 1854	16	9	8	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,690	—	3
1. From interest on monies invested	—			3. Provisions	5,003	1	7
2. From sales and produce of labour, &c. &c.	185	8	3	4. Necessaries, &c.	931	8	7
3. Maintenance Account, viz.:				5. Surgery and dispensary	126	2	11
Private patients	—			6. Clothing	538	10	1
Pauper ditto	9,801	11	3	7. Furniture and bedding	310	4	9
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	2,917	15	10	8. Funeral expenses	42	5	9
5. From voluntary contributions	—			9. Building and repairs	2,897	5	1
6. Repayment of expenses of removals	41	9	5	10. Garden and farm	359	15	2
7. Miscellaneous	—			11. Miscellaneous	375	19	7
				Balance due to bankers, 31st December 1854	1,331	19	9
Total Receipts	12,962	14	5	Total Payments	13,606	13	6
Balance due to bankers, 31st December 1855	668	—	5	Balance in steward's hands on 31st December 1855	24	1	4
£.	13,630	14	10	£.	13,630	14	10

LEICESTER AND RUTLAND COUNTIES LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	1,892	—	9	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,237	3	—
1. From interest on monies invested	—			3. Provisions	4,076	10	2
2. From sales and produce of labour, &c. &c.	279	4	11	4. Necessaries, &c.	676	—	2
3. Maintenance Account, viz.:				5. Surgery and dispensary	122	10	6
Private patients	1,734	14	4	6. Clothing	496	11	4
Pauper ditto	5,260	2	6	7. Furniture and bedding	834	3	2
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	1,139	6	3	8. Funeral expenses	27	4	—
5. From voluntary contributions	556	11	5	9. Building and repairs	2,334	10	4
6. Repayment of expenses of removals	—			10. Garden and farm	126	1	4
7. Miscellaneous	102	3	6	11. Miscellaneous	295	14	5
Cash from charity towards new buildings	400	—	—	Payments to charity, being one-fifth of profits	269	15	2
				Total Payments	10,496	3	7
				Balance in hand on 31st December 1855	868	—	1
Total Receipts £.	11,364	3	8	£.	11,364	3	8

LINCOLN COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	620	16	3¾	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,317	17	11
1. From interest on monies invested	—			3. Provisions	3,525	16	11¾
2. From sales and produce of labour, &c. &c.	515	16	6	4. Necessaries, &c.	958	2	10
3. Maintenance Account, viz.:				5. Surgery and dispensary	214	18	9
Private patients	—			6. Clothing	433	14	4
Pauper ditto	6,785	18	—	7. Furniture and bedding	95	14	5¾
For vagrants	68	11	—	8. Funeral expenses	6	—	—
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	—			9. Building and repairs	—		
5. From voluntary contributions	—			10. Garden and farm	267	14	5½
6. Repayment of expenses of removals	—			11. Miscellaneous	172	19	8
7. Miscellaneous	—			Total Payments	6,992	19	5
				Balance in hand on 31st December 1855	998	2	4¾
Total Receipts £.	7,991	1	9¾	£.	7,991	1	9¾

MIDDLESEX COUNTY LUNATIC ASYLUM, AT COLNEY HATCH.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	929	3	4	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	6,509	—	3
1. From interest on monies invested	—			3. Provisions	15,324	9	11
2. From sales and produce of labour, &c. &c.	94	8	3	4. Necessaries, &c.	2,979	3	1
				5. Surgery and dispensary	844	18	5
3. Maintenance Account, viz.:				6. Clothing	2,047	16	6
Private patients	—			7. Furniture and bedding	1,445	10	2
Pauper ditto	32,992	17	5	8. Funeral expenses	35	—	8
				9. Repairs	3,523	13	7
4. From county and borough treasurers:				10. Garden and farm	1,848	19	9
For repairs	3,538	9	11	11. Miscellaneous	883	7	3
For improvements	47	12	9	Improvements	63	—	6
				Treasurer of the Asylum; amount advanced by him	1,000	—	—
5. From voluntary contributions	—						
6. Repayment of expenses of removals	—			Total Payments	36,505	—	1
7. Miscellaneous	51	2	6	Balance in hand on 31st December 1855	1,148	14	1
Total Receipts £.	37,653	14	2	£.	37,653	14	2

MIDDLESEX COUNTY LUNATIC ASYLUM, HANWELL.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	174	3	9	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	5,119	11	—
1. From interest on monies invested	—			3. Provisions	11,667	13	8
2. From sales and produce of labour, &c. &c.	151	1	2	4. Necessaries, &c.	1,801	19	11
				5. Surgery and dispensary	1,390	16	5
3. Maintenance Account, viz.:				6. Clothing	2,179	6	6
Private patients	—			7. Furniture and bedding	1,826	13	7
Pauper ditto	26,433	18	7	8. Funeral expenses	17	19	—
4. From county and borough treasurers:				9. Building and repairs	3,491	3	11
For buildings and repairs, furniture, fittings, &c.	3,325	10	—	10. Garden and farm	1,191	16	1
				11. Miscellaneous	782	15	8
5. From voluntary contributions	—						
6. Repayment of expenses of removals	—			Total Payments	29,469	15	9
7. Miscellaneous	—			Balance in hand on 31st December 1855	614	17	9
Total Receipts £.	30,084	13	6	£.	30,084	13	6

MONMOUTH, HEREFORD, BRECON, AND RADNOR JOINT COUNTIES LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s	d.
To balance in hand on 31st December 1854	46	10	10½	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,247	19	6
1. From interest on monies invested	—			3. Provisions	3,108	5	2½
2. From sales and produce of labour, &c. &c.	182	18	4	4. Necessaries, &c.	451	14	8½
				5. Surgery and dispensary	57	10	11
3. Maintenance Account, viz.:				6. Clothing	470	4	3
Private patients	—			7. Furniture and bedding			
Pauper ditto	6,912	11	3	8. Funeral expenses	—		
				9. Building and repairs	353	18	—
4. From county and borough treasurers:				10. Garden and farm	467	15	8½
For buildings and repairs, furniture, fittings, &c.	300	—	—	11. Miscellaneous	293	7	2½
				Balance and arrear, as per treasurer's account	86	18	5
5. From voluntary contributions	—						
6. Repayment of expenses of removals	—			Total Payments	6,537	13	11
7. Miscellaneous	—			Balance in hand on 31st December 1855	904	6	6½
Total Receipts £.	7,442	—	5½	£.	7,442	—	5½

NORFOLK COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	—			1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,068	14	6
1. From interest on monies invested	—			3. Provisions	4,274	2	—
2. From sales and produce of labour, &c. &c.	—			4. Necessaries, &c.	655	19	1½
3. Maintenance Account, viz.:				5. Surgery and dispensary	72	2	8½
Private patients	—			6. Clothing	401	16	9
Pauper ditto	7,474	19	10	7. Furniture and bedding	294	5	9
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	912	6	3	8. Funeral expenses	35	19	6
5. From voluntary contributions	—			9. Building and repairs	506	7	1
6. Repayment of expenses of removals	—			10. Garden and farm	50	—	—
7. Miscellaneous	6	18	11½	11. Miscellaneous	307	14	2
From county treasurer on account of diverting the turnpike-road, and making new road	2,450	—	—	Diverting the turnpike-road, and making new road	1,765	3	2
				To balance due to the treasurer, 1st January 1855	1,902	17	10½
Total Receipts £.	10,844	5	-½				
Balance due to treasurer, 31st December 1855	490	17	7				
£.	11,335	2	7½	Total Payments £.	11,335	2	7½

NOTTINGHAM COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	—			1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,044	12	10
1. From interest on monies invested	186	9	—	3. Provisions	3,529	—	3
2. From sales and produce of labour, &c. &c.	392	1	6	4. Necessaries, &c.	604	2	7
3. Maintenance Account, viz.:				5. Surgery and dispensary	91	13	11
Private patients	1,508	5	2	6. Clothing	364	19	4
Pauper ditto	4,664	17	10	7. Furniture and bedding	173	18	10
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	724	14	11	8. Funeral expenses	10	12	—
5. From voluntary contributions	258	16	6	9. Building and repairs	505	4	7
6. Repayment of expenses of removals	—			10. Garden and farm	81	13	4
7. Miscellaneous	3	11	8	11. Miscellaneous	1,268	2	10
Total Receipts £.	7,738	16	7	Total Payments	7,674	—	6
				Balance in hand on 31st December 1855	64	16	1
				£.	7,738	16	7

OXFORD AND BERKS COUNTIES LUNATIC ASYLUM, AT LITTLEMORE.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand of treasurers on 31st December 1854	1,739	9	3	1. Monies (if any) invested during the year	—		
Ditto of house steward, 31st December 1854	85	4	9	2. Salaries and wages	1,755	8	10
Receipts under the following heads, viz.:				3. Provisions	5,550	10	9½
1. From interest on monies invested	—			4. Necessaries, &c.	1,438	18	3½
2. From sales and produce of labour, &c. &c.	188	3	6	5. Surgery and dispensary	116	4	9
3. Maintenance Account, viz.:				6. Clothing	745	2	5
Private patients	—			7. Furniture and bedding	736	11	7
Pauper ditto	9,882	1	5	8. Funeral expenses, &c.	40	1	3
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	—			9. Building and repairs	474	6	9
5. From voluntary contributions	—			10. Garden and farm	155	18	3
6. Repayment of expenses of removals, &c.	36	4	—	11. Miscellaneous	252	17	7
7. Miscellaneous	—			Total Payments	11,266	—	6
				Balance in treasurer's hands on 31st December 1855 £. 535 10 3	665	2	5
				Ditto in steward's hands, ditto 129 12 2			
Total Receipts £.	11,931	2	11	£.	11,931	2	11

SALOP AND MONTGOMERY COUNTIES LUNATIC ASYLUM.

Receipts.	£.	s.	d.
To balance in hand on 31st December 1854	—		
Receipts under the following heads, viz.:			
1. From interest on monies invested	—		
2. From sales and produce of labour, &c. &c.	—		
3. Maintenance Account, viz.:			
Private patients	—		
Pauper ditto	8,594	5	10
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	7,671	1	7
5. From voluntary contributions	—		
6. Repayment of expenses of removals	—		
7. Miscellaneous	—		
Total Receipts £.	16,265	7	5

Payments.	£.	s.	d.
1. Monies (if any) invested during the year	—		
2. Salaries and wages	1,096	7	—
3. Provisions	4,860	4	11
4. Necessaries, &c.	726	10	7
5. Surgery and dispensary	168	4	1
6. 7. Clothing and bedding	935	4	11
8. Funeral expenses	18	2	—
9. Building and repairs	6,937	7	6
10. Garden and farm	—		
11. Miscellaneous	481	17	6
Balance due to treasurer, 31st December 1854	449	—	2
Total Payments	15,672	18	8
Balance in hand on 31st December 1855	592	8	9
£.	16,265	7	5

SOMERSET COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.
To balance in hand on 31st December 1854	677	15	5
Receipts under the following heads, viz.:			
1. From interest on monies invested	—		
2. From sales and produce of labour, &c. &c.	953	14	—
3. Maintenance Account, viz.:			
Private patients	—		
Pauper ditto	7,431	12	—
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	—		
5. From voluntary contributions	—		
6. Repayment of expenses of removals and funerals	112	6	—
7. Miscellaneous	—		
Total Receipts £.	9,175	7	5

Payments.	£.	s.	d.
1. Monies (if any) invested during the year	—		
2. Salaries and wages	1,235	15	4
3. Provisions	4,367	15	10
4. Necessaries, &c.	712	6	10½
5. Surgery and dispensary	42	16	8½
6. Clothing	524	7	9
7. Furniture, repairs, and bedding	367	10	9
8. Funeral expenses	70	18	—
9. Building	367	5	10
10. Garden and farm	558	17	7
11. Miscellaneous	203	8	1
Total Payments	8,451	2	9
Balance in hand on 31st December 1855	724	4	8
£.	9,175	7	5

STAFFORD COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.
To balance in hand on 31st December 1854	—		
Receipts under the following heads, viz.:			
1. From interest on monies invested	—		
2. From sales and produce of labour, &c. &c.	92	2	2
3. Maintenance Account, viz.:			
Private patients	—		
Pauper ditto	8,443	14	8
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	689	6	3
5. From voluntary contributions	—		
6. Repayment of expenses of removals	—		
7. Miscellaneous	—		
	9,225	3	1
Balance due to treasurers, 31st December 1855	1,107	1	7
Total Receipts £.	10,332	4	8

Payments.	£.	s.	d.
Balance due to treasurers, 31st December 1854	1,666	15	7
1. Monies (if any) invested during the year	—		
2. Salaries and wages	1,844	1	4
3. Provisions	4,486	13	2
4. Necessaries, &c.	588	13	4
5. Surgery and dispensary	157	10	6
6. Clothing	255	18	—
7. Furniture and bedding	290	—	8
8. Funeral expenses	56	9	8
9. Building and repairs	599	14	1
10. Garden and farm	229	15	10
11. Miscellaneous	156	12	6
Total Payments	10,332	4	8
Balance in hand on 31st December 1855	—		
£.	10,332	4	8

SUFFOLK COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.
To balance in hand on 31st December 1854	—		
Receipts under the following heads, viz.:			
1. From interest on monies invested	—		
2. From sales and produce of labour, &c. &c.	—		
3. Maintenance Account, viz.:			
Private patients	159	16	6
Pauper ditto	5,994	13	11
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	1,404	11	9
5. From voluntary contributions	—		
6. Repayment of expenses of removals	—		
7. Miscellaneous	6	14	–
From garden and farm, as per last report printed	368	16	3
Total Receipts - £.	7,934	12	5

Payments.	£.	s.	d.
1. Monies (if any) invested during the year	—		
2. Salaries and wages	1,058	16	4
3. Provisions	3,240	6	10
4. Necessaries, &c.	556	2	3
5. Surgery and dispensary	73	7	9
6. Clothing	513	16	5
7. Furniture and bedding	449	9	2
8. Funeral expenses	31	1	–
9. Building and repairs	685	11	2
10. Garden and farm	295	12	3
11. Miscellaneous	419	7	1
By balance due to treasurers, 31st December 1854	172	8	9
Total Payments	7,495	19	–
Balance in hand on 31st Dec. 1855	438	13	5
£.	7,934	12	5

SURREY COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.
To balance in hand on 31st December 1854	2,570	18	10
Receipts under the following heads, viz.:			
1. From interest on monies invested	—		
2. From sales and produce of labour, &c. &c.	305	12	7
3. Maintenance Account, viz.:			
Private patients	—		
Pauper ditto	21,288	3	3
4. From county treasurer: for buildings and repairs, furniture, fittings, &c.	2,433	7	3
Ditto - for additional works	1,311	11	4
5. From voluntary contributions	—		
6. Repayment of expenses of removals	—		
7. Miscellaneous	59	8	2
Total Receipts - £.	27,969	1	5

Payments.	£.	s.	d.
1. Monies (if any) invested during the year	—		
2. Salaries and wages	3,327	12	6
3. Provisions	12,314	3	3
4. Necessaries, &c.	4,023	8	9
5. Surgery and dispensary	120	5	4
6. Clothing	1,301	11	1
7. Furniture and bedding	383	1	11
8. Funeral expenses	41	6	–
9. Building and repairs	2,612	2	2
10. Garden and farm	—		
11. Miscellaneous	145	11	5
Total Payments	24,269	2	5
Balance in hand on 31st Dec. 1855	3,699	19	–
£.	27,969	1	5

WARWICK COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.
To balance in hand on 31st December 1854	—		
Receipts under the following heads, viz.:			
1. From interest on monies invested	—		
2. From sales and produce of labour, &c. &c.	—		
3. Maintenance Account, viz.:			
Private patients	–	13	6
Pauper ditto	6,959	1	6
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	—		
5. From voluntary contributions	—		
6. Repayment of expenses of removals	—		
7. Miscellaneous	—		
	6,959	15	–
Deduct amount transferred to building account for extra weekly charge for out county patients	117	1	5
	6,842	13	7
Building Account:			
From rates	4,474	18	6½
From Maintenance Account, amount transferred	117	1	5
Total Receipts	11,434	13	6½
Balance due to treasurer, 31st December 1855	140	15	5¾
£.	11,575	9	–¼

Payments.	£.	s.	d.
1. Monies (if any) invested during the year	—		
2. Salaries and wages	1,181	11	–½
3. Provisions	4,307	7	2
4. Necessaries, &c.			
5. Surgery and dispensary	51	8	11
6. Clothing	507	–	1
7. Bedding			
8. Funeral expenses	1	1	–
9. Building and repairs	—		
10. Garden and farm	307	1	4¾
11. Miscellaneous	193	8	–
Building account, &c. &c.	5,026	11	5
Total Payments - £.	11,575	9	–¼

WILTS COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	—			1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,321	3	2
1. From interest on monies invested	—			3. Provisions	3,377	9	2¼
2. From sales and produce of labour, &c. &c.	280	15	7	4. Necessaries, &c.	1,050	4	5
3. Miscellaneous Account, viz.:				5. Surgery and dispensary	134	11	6
Private patients	—			6. Clothing	187	1	11½
Pauper ditto	6,610	—	6	7. Furniture and bedding	212	11	3½
4. From county treasurer: for buildings and repairs, furniture, fittings, &c.	909	18	9	8. Funeral expenses, &c.	34	2	3
5. From voluntary contributions	—			9. Building and repairs, charged to "maintenance"	82	10	5
6. Repayment of expenses of removals, funerals, &c.	51	5	9	10. Garden and farm	334	7	5½
7. Miscellaneous	—			11. Miscellaneous	189	6	1½
				Buildings, new, and repairs to, and furniture and fittings; additional charged to "County Rate"	909	18	9
Total Receipts	7,852	—	7	Repaid county treasurer, extra charge for patients from non-contributing places	80	18	5
Balance due to treasurer, 31st December 1855	62	4	7¼				
£.	7,914	5	2¼	Total Payments £.	7,914	5	2¼

WORCESTER COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To stock in hand on 31st December 1854	1,487	1	2	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,234	17	7
1. From interest on monies invested	—			3. Provisions	3,217	9	11
2. From sales and produce of labour, &c. &c.	379	8	10	4. Necessaries, &c.	812	11	11
3. Maintenance Account, viz.:				5. Surgery and dispensary	49	6	2
Private patients	—			6. Clothing	271	5	—
Pauper ditto	7,094	14	8	7. Furniture and bedding	102	9	2
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	—			8. Funeral expenses	17	2	2
5. From voluntary contributions	—			9. Building and repairs	—		
6. Repayment of expenses of removals	—			10. Garden and farm	500	18	8
7. Miscellaneous	4	16	4	11. Miscellaneous	862	4	10
				By stock in hand, 31 December 1854	1,409	12	11
Total Receipts £.	8,966	1	—	Total Payments	8,477	18	4
				Balance in hand on 31st December 1855	488	2	8
				£.	8,966	1	—

EAST RIDING OF YORK COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	1,022	10	2½	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz:				2. Salaries and wages	1,348	15	10
1. From interest on monies invested	—			3. Provisions	2,813	4	3
2. From sales and produce of labour, &c. &c.	249	—	8	4. Necessaries, &c.	515	3	9
3. Maintenance Account, viz.:				5. Surgery and dispensary	22	4	7
Private patients	—			6. Clothing	395	3	11
Pauper ditto	5,334	19	—	7. Furniture and bedding	302	14	4
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	602	4	2	8. Funeral expenses	29	6	6
5. From voluntary contributions	—			9. Building and repairs	304	13	7
6. Repayment of expenses of removals	31	18	6	10. Garden and farm	626	3	10
7. Miscellaneous	208	15	4	11. Miscellaneous	105	8	9½
				Total Payments	6,462	19	4½
				Balance in hand on 31st December 1855	986	8	6
Total Receipts £.	7,449	7	10½	£.	7,449	7	10½

WEST YORK COUNTY LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	1,457	16	4	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	2,477	5	5
1. From interest on monies in bankers' hands	2	—	—	3. Provisions	9,010	3	11
2. From sales and produce of labour, &c. &c.	219	1	4	4. Necessaries, &c.	1,162	19	4
3. Maintenance Account, viz.:				5. Surgery and dispensary	308	7	—
Private patients	—			6. Clothing	1,364	13	11
Pauper ditto	14,957	15	—	7. Furniture and bedding	330	—	—
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	—			8. Funeral expenses	114	18	—
5. From voluntary contributions	—			9. Building and repairs	—		
6. Repayment of expenses of removals	—			10. Garden and farm	534	5	—
7. Miscellaneous	—			11. Miscellaneous	325	10	6
				Total Payments	15,628	3	1
				Balance in hand on 31st December 1855	1,008	9	7
Total Receipts £.	16,636	12	8	£.	16,636	12	8

BIRMINGHAM BOROUGH LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	—			1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	1,433	10	1
1. From interest on monies invested	—			3. Provisions	3,329	19	10
2. From sales and produce of labour, &c. &c.	2,027	1	10	4. Necessaries, &c.	852	17	11
3. Maintenance Account, viz.:				5. Surgery and dispensary	70	12	3
Private patients	1,031	13	5	6. Clothing	333	14	10
Pauper ditto, contributing parishes	5,546	6	4	7. Furniture and bedding	366	3	3
Ditto, not contributing ditto	193	17	2	8. Funeral expenses	19	12	7
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	—			9. Building and repairs	102	17	8
5. From voluntary contributions	—			10. Garden and farm	1,902	5	10
6. Repayment of expenses of removals	25	17	5	11. Miscellaneous	185	2	4
7. Miscellaneous	—			Total Payments	8,596	16	7
Vagrant paupers and criminal lunatics	414	12	7	Balance in hand on 31st December 1855	642	12	2
Total Receipts £.	9,239	8	9	£.	9,239	8	9

BRISTOL PAUPER LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	108	9	2	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	483	3	—
1. From interest on monies invested	—			3. Provisions			
2. From sales and produce of labour, &c. &c.	18	6	—	4. Necessaries, &c.	1,203	4	6
3. Maintenance Account, viz.:				5. Surgery and dispensary			
Private patients	—			6. Clothing			
Pauper ditto	1,771	4	4	7. Furniture and bedding	14	11	—
4. From county and borough treasurers: for buildings and repairs, furniture, fittings, &c.	—			8. Funeral expenses	1	—	—
5. From voluntary contributions	—			9. Building and repairs	22	11	9
6. Repayment of expenses of removals	—			10. Garden and farm	—		
7. Miscellaneous	—			11. Miscellaneous	147	16	10
				Total Payments	1,872	7	1
				Balance in hand on 31st December 1855	25	12	5
Total Receipts £.	1,897	19	6	£.	1,897	19	6

HAVERFORDWEST BOROUGH LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	2	3	-½	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	85	9	6½
1. From interest on monies invested	—			3. Provisions	412	14	6
2. From sales and produce of labour, &c. &c.	—			4. Necessaries, &c.	68	2	4
3. Maintenance Account, viz.:				5. Surgery and dispensary	30	—	—
Private patients	—			6. Clothing	55	—	—
Pauper ditto	669	8	10	7. Furniture and bedding	—		
4. From county and borough treasurers:				8. Funeral expenses	3	6	—
For buildings and repairs, furniture, fittings, &c.	—			9. Building and repairs	—		
5. From voluntary contributions	—			10. Garden and farm	—		
6. Repayment of expenses of removals	—			11. Miscellaneous	16	16	—
7. Miscellaneous	—			Total Payments	671	8	4½
				Balance in hand on 31st December 1855	—	3	6
Total Receipts £.	671	11	10½	£.	671	11	10½

HULL BOROUGH LUNATIC ASYLUM.

Receipts.	£.	s.	d.	Payments.	£.	s.	d.
To balance in hand on 31st December 1854	995	12	6½	1. Monies (if any) invested during the year	—		
Receipts under the following heads, viz.:				2. Salaries and wages	545	8	9
1. From interest on monies invested	7	18	3	3. Provisions	828	—	4
2. From sales and produce of labour, &c. &c.	25	—	4½	4. Necessaries, &c.	206	7	2
3. Maintenance Account, viz.:				5. Surgery and dispensary	—		
Private patients	—			6. Clothing	123	11	7
Pauper ditto	1,989	1	6	7. Furniture and bedding	39	—	—
4. From county and borough treasurers:				8. Funeral expenses	—		
For buildings and repairs, furniture, fittings, &c.	—			9. Building and repairs	191	18	8
5. From voluntary contributions	—			10. Garden and farm	—		
6. Repayment of expenses of removals	—			11. Miscellaneous	106	9	2
7. Miscellaneous	—			Total Payments	2,040	15	8
				Balance in hand on 31st December 1855	976	17	—
Total Receipts £.	3,017	12	8	£.	3,017	12	8

LUNATIC ASYLUMS.

ABSTRACTS of ACCOUNTS of MONIES Received and Paid on account of the several COUNTY and BOROUGH ASYLUMS in *England* and *Wales* during the Year ending 31st December 1855.

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